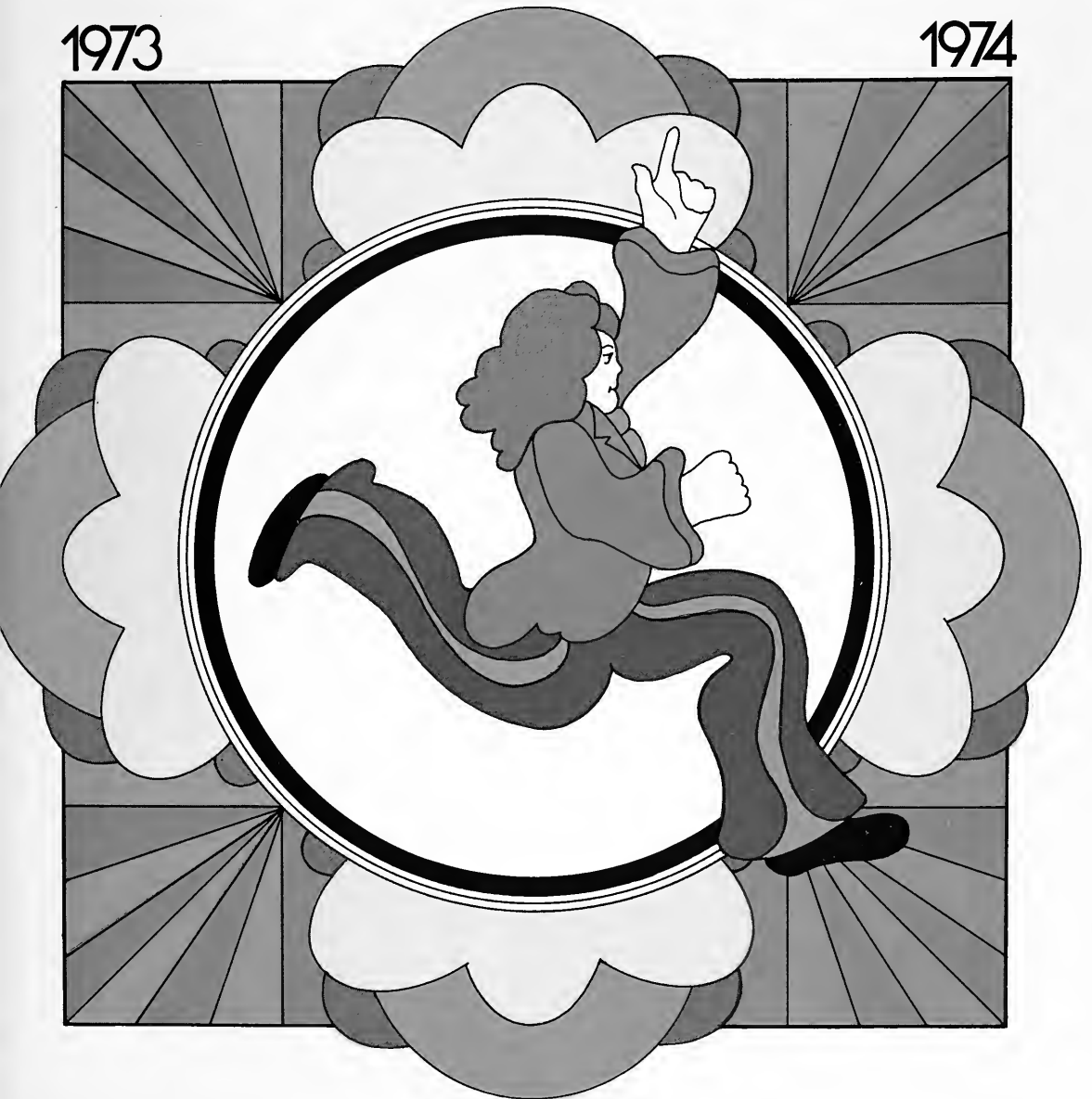


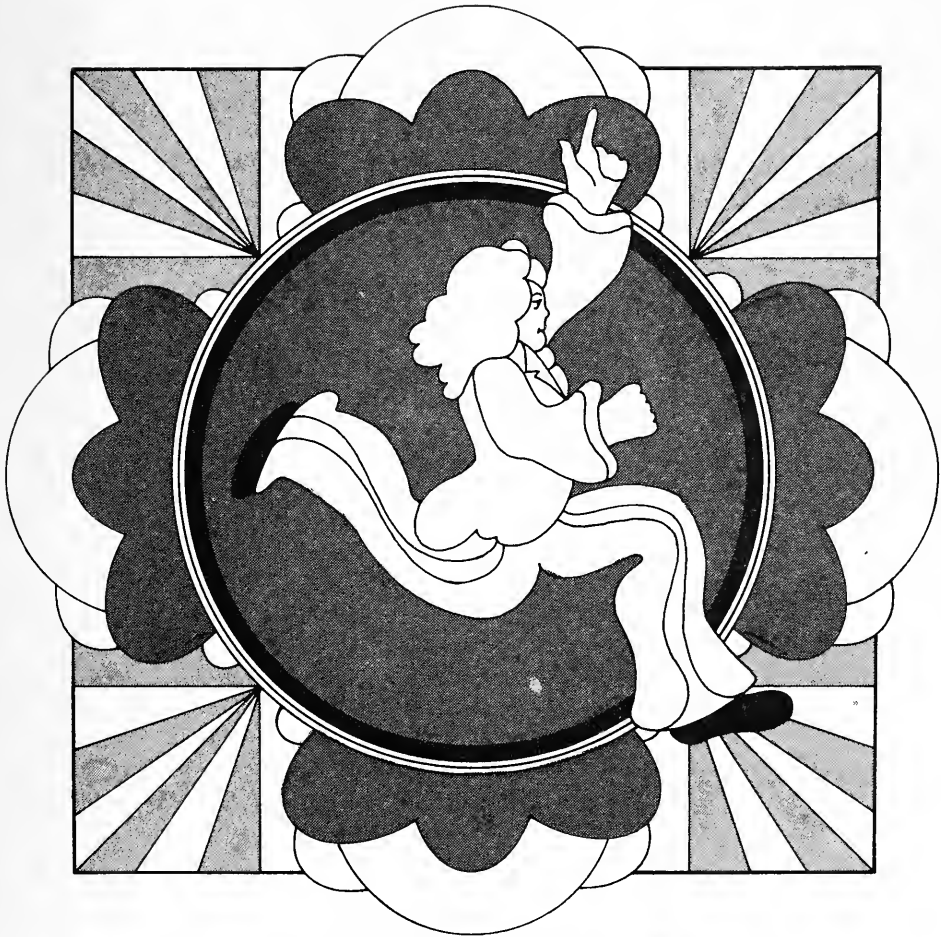
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TOWSON STATE COLLEGE BULLETIN

1973

1974





TOWSON STATE COLLEGE BULLETIN 1973-1974



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DR. JAMES L. FISHER, *President*

The College

PHILOSOPHY The Towson program rests fundamentally on the idea that a liberal education is indispensable for the preservation of a free society. Secondly, it rests on the belief that the means of acquiring special competence should be available at the undergraduate level in a tax-assisted multi-purpose college.

These two principles go hand in hand. If it is vital that all students take on the mental habits and values necessary to thoughtful citizenship, it is also important that every student be able to acquire a sense of professional direction. The curriculum is designed, then, so that all students will pursue those studies — the traditional arts and sciences — that promote critical thought about man and his environment; and so that each student may discover and cultivate a particular intellectual or occupational bent.

OBJECTIVES In order to implement its philosophy, Towson State College seeks to challenge every student:

1. To make college life a model community which breeds a sensitivity to the dignity of others and is relevant to the needs of the ongoing society.
2. To develop an appreciation of and respect for the inherent wisdom and values of the past through knowledge of the discoveries and art forms of his own and other cultures.
3. To use this knowledge selectively and objectively in the search for new knowledge.
4. To develop an understanding of himself in relation to others in his community, the nation, and the world.
5. To develop the skills necessary to prepare himself to assume the role of a responsible member of the professional, social, and intellectual community.

HISTORY Towson State College, the oldest and largest of Maryland's public colleges, traces its history back to 1865. At that time the General Assembly of Maryland established a state-wide public school system and authorized the first state teacher training institution, The Maryland State Normal School, later known as the State Teachers College at Towson, and since 1963, Towson State College.

Formally opened in Baltimore on January 15, 1866, the school was, for many years, the only institution devoted exclusively to the preparation of teachers for the public schools of Maryland.

The School occupied three different locations in the city of Baltimore before moving to its present suburban location in 1915.

In 1946 the arts and sciences program was introduced at Towson. Beginning as a two-year transfer program, it was extended to a four-year, degree-granting program in 1960.

A graduate program for elementary school teachers leading to the Master of Education degree was inaugurated in 1958.

In 1963 the College was authorized, by action of the Legislature, to expand its offering in the arts and sciences while maintaining a strong program in teacher education and to change its name to Towson State College.

In 1965 the College expanded its graduate program to include offerings for guidance counselors and secondary school teachers.

In 1966 the College completed 100 years of service to the State, having graduated more than 12,000 students during its first century.

ACCREDITATION

Towson State College is accredited by the Middle States Association of Colleges and Secondary Schools, the Maryland State Board of Education and the National Council for the Accreditation of Teacher Education. The College is a member of the American Council on Education and is approved by the American Association of University Women.

BOARD OF TRUSTEES

The College is governed by a nine-member Board of Trustees—eight members appointed by the Governor for nine-year terms—and the state superintendent of schools, a permanent member, ex officio. This same board also controls the five other state colleges.

THE CAMPUS AND FACILITIES

The College is situated on a campus of over 320 acres located a mile and one-half beyond the northern border of the city of Baltimore on beautifully rolling wooded grounds.

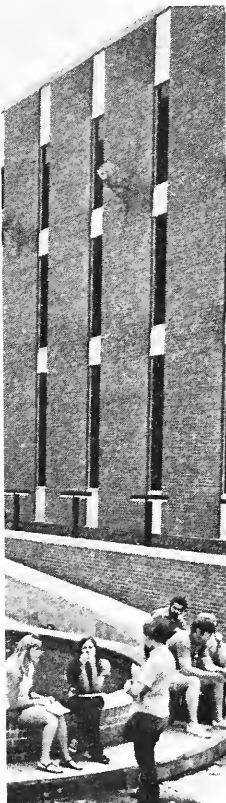
Within an eight-mile radius of the campus are all the cultural advantages of the city of Baltimore—the Peabody Conservatory of Music and Library, the Enoch Pratt Free Library, the Walters Art Gallery, the Baltimore Museum of Art, and the many theaters and other cultural centers necessary for a well rounded college experience.

Campus buildings and facilities give excellent support to the various College programs. The following are of particular interest:

1. Stephens Hall, the original academic building erected in 1915, houses the main public performance auditorium, the studio theatre, classrooms, and the departments of mathematics, psychology, and driver education. This Jacobean building with its clock tower has become a landmark in the Baltimore area.
2. The modern five-story Albert S. Cook Library has well-developed holdings in the arts and sciences and teacher education. Towson's long history of teacher education is reflected in the extensive collections of bound volumes, reference works and periodicals in this field as well as substantial holdings in microfilm and microcard. The collections of curriculum materials, text books, tradebooks and audiovisual aids are particularly noteworthy.

The Center for Asian Arts, located on the fifth floor of the library, will move to the new Fine Arts Building in the summer of 1973.

3. Van Bokkelen Hall contains classrooms and faculty offices for the departments of speech and mass communication arts.
4. Linthicum Hall, completed in 1967, is the largest classroom building on campus. It houses the departments of English, modern languages, history, geography, political science, economics, sociology, and business administration.
5. Smith Science Hall was first occupied in the fall of 1965. Included in the building are biology, chemistry, physics, and science education offices, classrooms, laboratories, and speech function rooms such as student and faculty work and preparation areas. The Watson-King Planetarium is on the top floor.





6. Lida Lee Tall Learning Resources Center, a laboratory school of grades K-6, greatly facilitates field studies of schools and children. The center's program also includes a nursery for four-year olds and a day-care center.
7. Burdick Hall, the health and physical education building completed in 1968, houses three gymnasiums, an olympic size swimming pool, classrooms, and various training and dressing rooms.
8. The Audiovisual Communications Building is the remodeled former Albert S. Cook Library. It contains the audiovisual communications department and the College Media Services which includes equipment and film rentals, television studios, and graphics and photography services. It is one of the best equipped audiovisual centers in the state.
9. The College Center, a new three-story building opened in the fall of 1971, provides cultural and recreational activities for the entire campus. Located in the new center are the post office, book store, box office, dining areas for private and banquet size groups, bowling alleys, and a billiard room.

For complete information concerning the College Center, please refer to the index.

10. The Administration Building, a new three-story structure at the corner of Osler and Towsontown Boulevard, opened in 1972. It contains all of the principal administration offices and some faculty offices.
11. The Health Center contains on the lower level a foyer and waiting room, offices for the physicians, examination rooms, and physio-therapy equipment. There are eight beds available for in-patient care.
12. The General Services Building, opened in the spring of 1970, contains offices for the directors of the physical plant and security, managers of fire and safety, housekeeping, transportation and grounds supervisor.

Central Receiving and Central Stores are also located there. The building also houses maintenance and trade shops including electrical, carpentry and plumbing.

13. Glen Esk, formerly the president's home, is now occupied by Counseling & Psychological Services.
14. The Residence Halls: A total of 862 students are presently living in Prettyman Hall, Scarborough Hall, Ward Hall, West Hall, and the new residence tower. The additional residence halls, Richmond and Newell, are undergoing complete renovation. The completion of these buildings and the opening of the top floors of the new residence tower will increase the total student occupancy to approximately 1,200.
15. The new \$6.5-million Fine Arts Building opened in May, 1973, and houses the art, music and theatre arts departments as well as public performance areas and art galleries, studios, laboratories and offices.

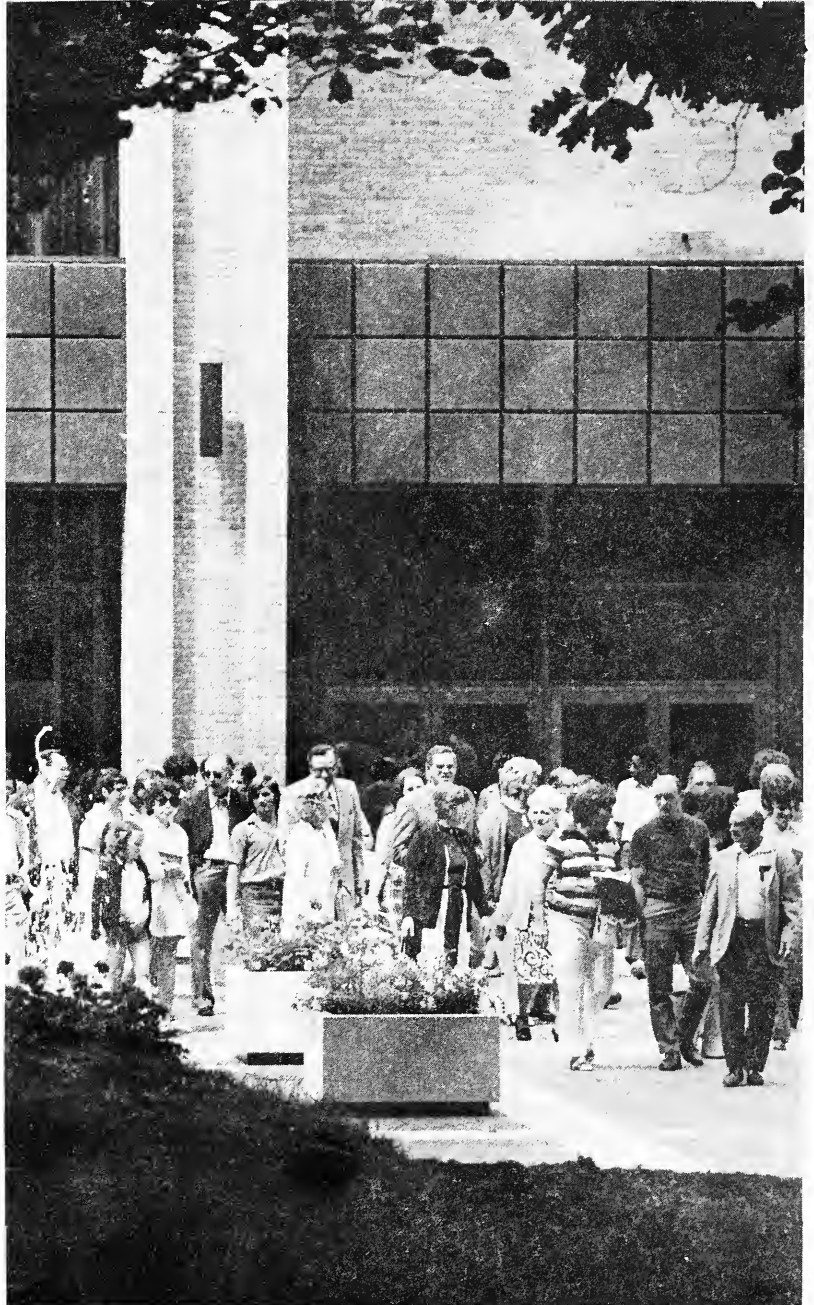
FUTURE DEVELOPMENTS

Located in one of the fastest growing areas of the county, the Towson State College enrollment is increasing rapidly. The College's 1972 enrollment was 6,450 day students and 5,000 evening students including 2,000 graduate students. In addition, over 6,500 students enrolled for two five-week summer sessions.

An optimal enrollment ceiling is under study which may suggest the college level off at 8,500 to 9,000 day time students.

Construction funds are available for a new classroom building which will house the psychology and education departments, a new science building and a \$7-million physical education building with construction scheduled to begin in 1973 for all of these new structures.

The renovation of Richmond and Newell Halls also begins in 1973.



Admission

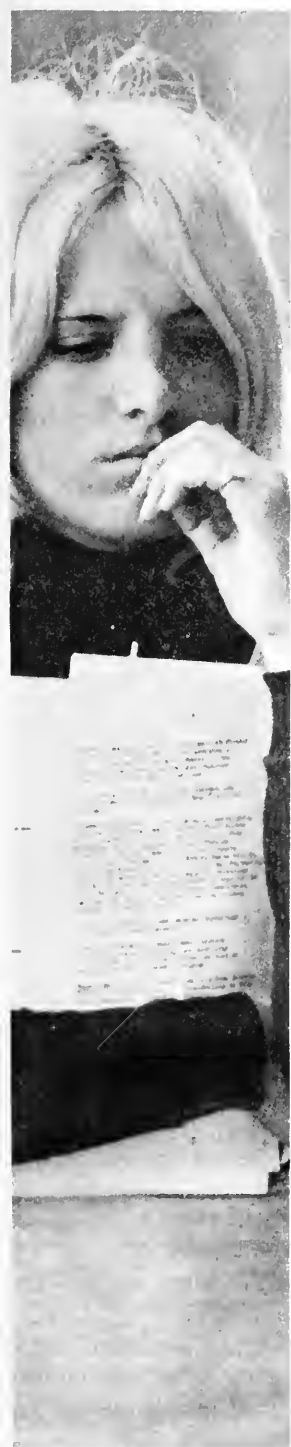
Admission to Towson State College is granted to all applicants whose academic and personal qualifications give promise of success in the College. Because of limited facilities, the College reserves the right to close admissions when no further space remains. It is therefore advisable for high school students to make their college choice at the close of their junior year or early in their senior year.

Students seeking admission should file applications during the first semester of the senior year. Priority for admission will be given to those whose applications and admissions material are received by March 1. Admission for February is limited to students with advanced standing (one year or more of college work completed). No application for February admission will be accepted after November 15. All admission material for February entrance must be received by December 1.

Applicants with excellent records are granted admission on the basis of high school work completed, with the condition that the remaining high school work will be satisfactory. Candidates for admission to Towson State College are strongly urged to complete a college preparatory program in high school.

The following are the admission requirements established by the Board of Trustees of the State Colleges.

1. Admission to the State Colleges shall be determined without regard to race, color, religion, or sex.
2. Admission: High school graduates
 - A. Admission shall be granted to graduates of high schools on the basis of grades, rank, admission test scores, and such other evidence, including the recommendations of appropriate high school officials, as may be deemed indicative of the ability of the applicant to complete a course of study in college leading to a degree.
 - B. No admission offer shall be made prior to receipt of a candidate's scores on the admission tests administered in the candidate's senior year or subsequent thereto, except as herein provided. Early admission may be offered to not more than a maximum of twenty percent of the anticipated enrollment in the freshman class. Such an offer shall be made only to an applicant of demonstrated superior scholarship and promise, as evidenced by his record through the junior year and by his performance on the admission tests administered in his junior year or subsequent thereto.
 - C. The tests to be used for admission purposes shall be the College Board Scholastic Aptitude Tests, effective with applicants for admission in September, 1967.
 - D. Admission prior to graduation from high school shall be conditional upon completion of the high school curriculum in a manner that would qualify the student to admission under paragraph A.
 - E. In the evaluation of academic credentials no preference shall be granted as between residents of the State, upon the basis of their places of residence.
 - F. Completion of a college preparatory curriculum shall not be a condition of admission. High school graduates who have not followed a college preparatory curriculum, but whose



grades, rank, and aptitude test scores indicate the potential to complete a college degree program, shall not be denied admission on that ground.

3. Admission: non-graduates of high school

Admission shall be granted to applicants who are not high school graduates on the basis of high school equivalence examinations, the admission test scores, and such other evidence, including the recommendations of appropriate persons, as may be deemed indicative of the ability of the applicant to complete a course of study in college leading to a degree.

4. Admission: Out-of-state

A maximum of fifteen percent of the total student body at each college may be composed of out-of-state students and foreign students not resident in Maryland. However, the college will be expected to meet its obligations to qualified resident students before approaching the maximum enrollment of out-of-state and non-resident foreign students.

5. Foreign Students

A. A foreign student not resident in the United States shall receive the same schedule of fees as an out-of-state resident.

B. All foreign student applicants will be required to take the Test of English as a Foreign Language which is administered by the College Entrance Examination Board.

6. Student Residency Classifications for Tuition Purposes

A. *General.* To qualify as a resident for tuition purposes for any given semester, an individual must have maintained his/her domicile in Maryland for at least six months immediately prior to the last date available for initial registration for that semester in the applicable State College.

B. *Domicile.*

(1) *Establishment of domicile.* The term "domicile" shall be synonymous with the term "residence." Domicile is a person's permanent place of abode; namely, there must be an intention to live permanently or indefinitely in Maryland. Domicile must be established in Maryland for a purpose independent of attendance at a State College.

(2) *Maintenance/change of domicile.* For the purpose of residency for tuition purposes, only one domicile may be maintained.

(a) A domicile in Maryland is lost when a new one is established elsewhere, or if an individual leaves the State with no intent to return to Maryland. After residing elsewhere for six months, regardless of intent to return, a student's status as a resident for tuition purposes is in question.

(b) The domicile of a student shall be determined at the time of initial registration but may thereafter be changed for any subsequent semester if circumstances change in relation to these regulations.

(c) The burden of proof of domicile shall necessarily rest with the student.

(3) *Domicile of a minor.* The domicile of an unmarried, unemancipated minor is normally that of the parent having custody of the minor. The following extenuating circumstances shall apply:





- (a) If both parents are deceased, the domicile of the minor shall normally be that of the legal guardian if one has been appointed. If no legal guardian has been appointed, the minor's domicile shall normally be that of the person *in loco parentis* to the minor. A person stands *in loco parentis* to a student when he has put himself in the situation of a lawful parent by assuming the obligations incident to the parental relation without going through the formalities necessary to legal adoption. The determination of such status will be made on a case by case basis by the responsible college official who will consider who has custody or control of the student, who is financially supporting the student, and who has assumed general responsibility for his/her welfare.
 - (b) If the parent, legal guardian, or person *in loco parentis* (whichever is applicable) having custody of the minor changes his/her domicile to another state, the student shall be charged out-of-state tuition for any semester commencing six months after the person having custody changes his/her domicile.
 - (c) A non-resident student who reaches the age of twenty-one while attending a State College does not qualify for classification as a resident for tuition purposes simply by virtue of having become an emancipated student.
 - (d) An emancipated student is considered an adult for the purpose of determining his/her residence classification.
 - (e) The residence of a married minor shall be determined in the same manner as an adult.
- (4) *Domicile of a woman.*
- (a) A married woman must establish her domicile independently of her husband, even though they live jointly.
 - (b) A divorced woman must establish her own domicile.
 - (c) A separated woman must establish her own domicile.
 - (d) A minor whose marriage is annulled takes on the domicile of her parent, legal guardian, or person *in loco parentis*.
 - (e) A woman over twenty-one whose marriage is annulled is responsible for establishing her own domicile.
- (5) *Emancipation.*
- (a) Minors claiming emancipation from their parent, legal guardian, or person *in loco parentis* (if applicable) must present one or more of the following documents to substantiate any claim of emancipation:
 - (i) Proof of place and length of domicile in the State;
 - (ii) Marriage Certificate;
 - (iii) Court order declaring that a student under the age of twenty-one is emancipated from his/her parent or legal guardian, (A notarized letter and a copy of the previous year's tax return from the parent(s) or legal guardian may suffice if the costs of obtaining a court order place an undue financial burden on the student.)



- (b) Minors claiming emancipation must meet the domicile requirements of an adult.
- (6) *Adults.* A person twenty-one years of age or older is a resident if he/she has maintained continuous domicile in Maryland for six months immediately prior to the last date available for initial registration.
- (7) *Military Personnel.*
 - (a) Members of the Armed Forces not from Maryland at the time of entrance into the Armed Forces and stationed in Maryland may be considered residents of this State if they establish domicile in Maryland.
 - (b) The dependents of men and women in any branch of the Armed Forces who are stationed in Maryland and who have established domicile in the State six months prior to their first registration are granted residence status for tuition purposes.
 - (c) A member of the Armed Forces who was a resident of Maryland at the time he/she entered the Armed Forces retains his/her residency status as long as he/she remains in the Armed Forces provided he/she does not establish domicile elsewhere.
 - (d) An adult sent by a branch of the Armed Forces to a State College for the purpose of completing degree requirements may be granted residence status for tuition purposes.
- (8) *Foreign Nationals.*
 - (a) Any foreign national holding a permanent United States immigrant visa must meet the domicile requirements of an adult or a minor, as applicable.
 - (b) A foreign national possessing a student visa cannot be classified as a resident of Maryland.
 - (c) The minor sons and daughters of citizens of other countries who are holders of a G-4 visa and whose parent(s) or legal guardian establish domicile in Maryland for a period of six months prior to registration at a State College may be granted residence status for tuition purposes.
 - (d) Adults on refugee visas of other countries may be granted Maryland residence status provided they establish domicile in the State for a period of six months prior to their first registration at a State College. Minors acquire the residence of their parent(s) or legal guardian.
- (9) *Responsibility of Students.*
 - (a) Any student or prospective student in doubt concerning his/her residence status is responsible for receiving a ruling from the designated official at the applicable State College.
 - (b) A student who alters his/her status from resident to non-resident, or vice-versa, has the responsibility of informing the designated official at the applicable State College.
 - (c) The residency status of a student may be altered by the applicable State College on the basis of its own findings.



7. Admission: Advanced undergraduate standing

A. An applicant for advanced undergraduate standing must present from a college or university regionally accredited or accredited by the Maryland State Department of Education, the last that he attended, a transcript and record showing he left in good standing. Credit shall be allowed for all courses that approximate the requirements of the particular college, or, if not offered at the college, are approved by the appropriate department of the college, or, in the absence of an appropriate department, by the Admissions Committee of the college. No transfer credit shall be allowed for courses in which the applicant has earned a "D" or "F" grade. In all cases the applicant must spend the final year "in residence" at the college as a full-time student. Exemption from the preceding requirement may be granted on an individual basis by the Standards Committee, except that in no case shall transfer credit be allowed for courses in which the applicant has earned a "D" or "F" grade.

B. It is the policy of the Board of Trustees that every effort shall be made to facilitate the transfer of graduates from the public community-junior colleges of the State of Maryland to the State Colleges. Such graduates who have pursued a transfer program and who have achieved an Associate in Arts Degree within four semesters in the case of full-time students, or the equivalent in the case of part-time students shall have priority over other transfer applicants for upper class standing. The equivalency of their credits shall be given a liberal interpretation. Nothing in this paragraph, however, shall be construed to allow transfer credit for courses in which the applicant has earned a "D" or "F" grade.

*C. Every student must meet the general education requirements, departmental requirements and earn 128 credits in order to graduate.

A maximum of 98 credits may be transferred to Towson State College from another regionally accredited institution; not more than 64 of these transfer credits may be from a two-year institution. The sequence in which the credits are obtained at 2-year and/or 4-year institutions does not affect in any way the determination of the previously stated total number of credits accepted for transfer. Transfer students are reminded of the rule that a minimum of 32 semester hours of upper division work is required for graduation.

Towson State College students must obtain prior approval of the Academic Standards Committee to take courses at another institution for the purpose of transferring them for credit. In general the Committee will not approve taking courses for credit at a 2-year institution once junior status (64 credits) has been attained.

D. Transfer credit will not be given for correspondence courses or for U.S.A.F.I. or military courses. Transfer credits will not be given for courses taken at a college or university which is not accredited by its regional association or the Maryland State Department of Education.

*For specific details regarding this policy contact Secretary of the Academic Standards Committee or Director of Admissions, Towson State College.

8. Admissions: Veterans

Any recently discharged veteran, eligible for G.I. benefits who has a high school diploma or equivalency will be admitted regardless of their previous academic record. Applicants should follow the regular admission procedures as outlined for freshmen, however, they will not be required to take the S.A.T. examination. In addition, veteran applicants should submit a copy of their Form DD 214 as verification of military service. Veterans who have had college level work since their discharge must apply for admission as a transfer student. Priority for admission will be granted to veterans who are residents of the state of Maryland. Admission for out-of-state veterans will be on a space available basis.

ADMISSIONS PROCEDURE

1. An applicant may secure an application form from the guidance office of the secondary school or from the Admissions Office of the College.
2. The applicant should complete the personal part of the form and forward it with the application fee of ten dollars to the Director of Admissions. The Secondary School Record should be given to the high school counselor immediately upon submitting the application to the College. The high school counselor will complete this record and forward it to the Director of Admissions. The transfer applicant, in addition, should arrange to have forwarded an official transcript of his college work.
3. The standardized test required for admission is the Scholastic Aptitude Test of the College Entrance Examination Board. The applicant should arrange to have forwarded to the Director of Admissions the results of this test. Students should take the test in their senior year of high school (either the November, December, or January administration).

ADVANCED PLACEMENT AND CREDIT FOR ENTERING STUDENTS

The College does not wish students to repeat work already taken. Entering freshmen who have had the opportunity for advanced work may receive advanced placement (and in some cases advanced credit) for this work.

During the summer prior to registration or during the opening week, freshmen take placement tests in various fields, and registration is based on the results of these tests.

Students who would like advanced credit as well as advanced placement are required to take the Advanced Placement Tests of the College Entrance Examination Board in May of the senior year of secondary school. In addition, students wishing to continue studying a foreign language should arrange to take the Language Listening Examination along with the Advanced Placement Tests. The results of these tests are received by the College about July 15. They are reviewed, along with grades in these subjects, by the departments concerned, and when appropriate, placement and/or credit is granted. Prior to final registration students are notified about advanced placement and credit. Additional information may be obtained by contacting the Director of Admissions at Towson State College.

A bulletin of information about the Advanced Placement Tests may be secured from the College Entrance Examination Board, P. O. Box 592, Princeton, N.J.

CREDIT FOR EXPERIENCE AND PREVIOUS LEARNING

Departments are permitted to grant credit to students for experience and previous learning when the student's achievement in a particular area is equal or is superior to that of a student having earned a C in the course taken. This is the level at which credit is generally granted to transfer students. While departmental standards for the granting of credit for experience and previous training may exceed this minimum, credit may not be given when achievement is below C level work. Departments may also offer advanced placement with no credit given if they wish.

When departments use standardized evaluative instruments such as CLEP, the College Board Advanced Placement Tests, or others, the same principle shall be adhered to. If the faculty member's evaluation reveals that the student's achievement is equal or superior to that of a student having earned a C in the course taken in a traditional way, the department will report the grade of PE to the Registrar on the form for granting course approval to students.

EVALUATION OF TRANSFER CREDITS

An applicant who has been admitted to the College as a transfer student will receive an evaluation of his previous course work from the Admissions Office with his letter of acceptance, or shortly thereafter. This evaluation will be preliminary in nature if the student is still taking course work. If the student accepts Towson's offer of admission, a final evaluation of transfer credit will be made upon receipt of the transcript showing his grades for the most recent semester.

Upon receipt of his final evaluation, a student should carefully review its contents. If he has any questions or feels there is an error, he must so advise the Admissions Office within 30 days. In no case will changes, additions, or corrections be made to the evaluation after the student has completed his first semester at Towson State College.

PLEDGE TO TEACH IN MARYLAND

The tuition waiver program to encourage students to prepare for teaching positions in Maryland was abolished after 1 October 1972.

All students enrolled under the tuition waiver agreements in the fall semester 1972 may continue their program to graduation providing they are continuously in good standing from the fall of 1972 until graduation.

Students who are required to interrupt their attendance after the fall semester 1972 would be able to resume the tuition waiver agreement providing the student had officially withdrawn from the College for a period not exceeding one year.

EVENING AND SUMMER PROGRAMS

Information pertaining to these programs may be obtained by referring to the Evening College Bulletin or the Summer Session Bulletin.

Expenses

TUITION Those who enroll in the arts and sciences program, and those in teacher education program pay \$100 per semester tuition.

For out-of-state students the tuition is \$325.00 per semester for enrollment in either the arts and sciences or teacher education program.

Special students (normally those who register for less than 12 semester hours) in the regular session, and all summer and evening session students pay \$25 per credit hour each semester for undergraduate and \$38.00 per credit hour for graduate work.

Tuition charges and fees are subject to change at any time by action of the Board of Trustees.

HOUSING AND BOARDING COSTS

Students who live on campus pay a maximum of \$587.50 for room and board for the academic semester. For all students who live off campus and who have been approved as resident students, the cost for meals varies for the academic semester. Various meal plans are available for your selection and vary in cost below the maximum listed above.

As residence space becomes available, those students who are eligible to reside in residence will be requested to room in one of the halls. For those students who enter the residence hall after the beginning of a semester, the charge will be prorated for the remainder of the semester plus one week.

Rates for living expenses are subject to change by the Board of Trustees.

OTHER FEES AND EXPENSES

A comprehensive fee of \$118.00 is charged each full-time student each semester. The yearly fee is \$236.00. This includes fees for student activities, athletics, college center, registration, and curriculum costs.

A limited number of lockers are available upon request at the College Center for student use in Stephens Hall. The College assumes no responsibility for personal property placed in the lockers. Lockers to be used by students taking physical education courses are assigned by the Departments of Physical Education in Burdick Hall. College Center lockers are available for \$1.00 per semester and may be obtained from the recreation office.

A graduation fee of \$15.00 for those receiving a bachelor's degree and a \$30.00 fee for those receiving a master's degree, plan A (with thesis) \$30.00, plan B (without thesis) \$25.00.

Dormitory students are assigned individual mail boxes. Each student shares a mail box with one or more students. There is a fee of \$1.00 per student included in the comprehensive fee.

A student is expected to buy the textbooks for his courses. They may be purchased in the College Bookstore. Students are required to buy gymnasium suits for the courses in physical education.

A late registration fee of \$5.00 is charged to any student who does not pre-register as prescribed.

A late change of course fee of \$5.00 is charged to students for making student-initiated changes in their academic schedule.

Evening and summer students are charged \$25.00 per credit hour and a \$14.50 comprehensive fee for each semester.



Students enrolled in a practice teaching experience (student teaching) are charged \$106 per practice experience.

The Board of Trustees reserves the right to make any changes or adjustments in tuition, fees, or charges when such charges are deemed necessary.

EXPENSES FOR MARYLAND RESIDENTS

Arts and Sciences students and Teacher Education students

	Semester I	Semester II	Total for Year
Comprehensive Fee -----	\$118.00*	\$118.00*	\$ 236.00*
Tuition -----	\$100.00	\$100.00	\$ 200.00
Total Day Students -----	\$218.00	\$218.00	\$ 436.00
Room and Board -----	\$587.50	\$587.50	\$1175.00
Total Boarding Students -----	\$805.50	\$805.50	\$1611.00

*Because of rapidly increasing costs and virtually a standstill budget appropriation, it may be necessary to increase the comprehensive fee \$50 to \$100.

PAYMENT OF FEES

All checks or money orders should be made payable to Towson State College for the exact amount of the charges. All fees are due and payable at the time of registration. No student will be admitted to classes until such payment has been made. A late fee of \$5.00 is charged when a check given in payment of fees is returned by the bank.

Financial policy set by the Board of Trustees and supported by the Legislative Auditors of the State of Maryland states that all previous balances must be paid prior to registration for the following academic semester.

ADVANCE PAYMENTS

Each applicant must pay a non-refundable application fee of \$20.00 and no application will be processed without this fee or a valid waiver.

A deposit of \$40.00 for room reservation is required of applicants for housing upon notification from the Housing Office that space is available. This fee is applied to the final amount of room and board due at the time of registration.

The above room deposit is refundable if the student cancels his application and notifies the Admissions Office, in writing, prior to June 30 for those entering in September and prior to December 15 for those entering in February, or if the College denies admission to the applicant.

The fee is forfeited if notice of cancellation is received after June 30.

All advance payments are sent to the Admissions Office.

LIABILITY FOR UNPAID TUITION

A Maryland student enrolled in the teacher education program who paid no tuition because of signing a pledge to teach in the State, is liable for unpaid tuition if he voluntarily withdraws from the teacher education program before graduation.

If he leaves college before graduation or transfers to the arts and sciences program, he will be billed at the arts and sciences tuition rate for the education he obtained at the College.

He may be released from the above tuition payment if he transfers to a Maryland institution which has a teacher education program approved by the State Department of Education and if he

reaffirms his pledge to teach for two years in the Maryland public schools upon graduation. Strict enforcement of the Teacher Waiver Contractual Agreement will be followed.

REFUNDS ON WITHDRAWAL

A student withdrawing from the College must complete an official withdrawal card and file it in the Registrar's Office before he is entitled to any refund.

Refund Policies

1. Towson State College shall adhere to the following policies with respect to refunds to students of tuition, room and board fees, and other charges.
2. The timing for effecting tuition refunds shall be as follows:
 - a. Prior to registration and before classes start—all tuition and fees except the application/registration fee shall be refunded the student.
 - b. Prior to the fifteenth calendar day of the official beginning of classes at the College—100 percent of tuition, less a \$10 administrative cost fee and \$25 application fee, shall be refunded the student.
 - c. Beginning with the fifteenth day after the official beginning of classes at the college to mid-semester, as shown on the college calendar—50 percent of tuition, less a \$10 administrative cost fee and \$25 application fee, shall be refunded the student.
 - d. After mid-semester—no tuition shall be refunded the student.
3. The same time span shall be utilized for fee refunds, except that:
 - a. Registration/application fee—non-refundable.
 - b. Room Deposit fee—non-refundable after July 1 prior to the fall semester.
 - c. Room Rent fee—non-refundable.
 - d. Student Union fee—non-refundable.
 - e. Auto Registration fee—non-refundable.
 - f. Student Activity fee—non-refundable.
 - g. Curriculum fee—non-refundable.
 - h. Athletic fee—non-refundable.
 - i. Applied fees (private instruction)—non-refundable.
 - j. Board fee shall be pro-rated on a weekly basis, plus one week up to mid-semester—thereafter, non-refundable.
 - k. Key Deposit fee—100 percent refundable.
4. The timing for effecting tuition and fee refunds for summer sessions shall be the same as for regular sessions except that for a period not to exceed fifteen calendar days after the official beginning of classes at the College, only 50 percent of the tuition shall be refunded the student. Beginning with the fifteenth day after the official beginning of classes at the College, no tuition shall be refunded the student.
5. Individuals who register for a full schedule and who drop courses after the official beginning of classes at the College shall not be entitled to a refund based on a credit-hour charge.
6. Any student dismissed by a college for disciplinary reasons shall not be entitled to any tuition or fee refund.



Student Personnel Program

The central purpose of the Personnel Program is to promote the kind of environment in which college students may develop into mature, well-balanced citizens, self-disciplined and aware of the life-long process of education and individual fulfillment. The program fosters student initiative, student responsibility and the rights of students to plan and execute. It provides opportunities for student involvement, for creativity, for accomplishment, and fosters a climate conducive to intellectual stimulation and growth. The program also provides services for those students who meet difficulties they themselves cannot resolve.

ADVISEMENT During the Orientation-Registration period, freshmen, transfers, and re-entry students are familiarized with the academic policies and procedures of the college by student advisors as well as by the Director of Advising.

An advising program is also available for minority students under the study skills support services center. Additional information can be found on page 41.

Students Who Have Selected a Major

Immediately upon deciding upon a major, the student should go to the department of that major to choose, or be assigned a faculty member who will serve as his advisor for the remaining years the student is in college.

Arts and Sciences majors are assigned advisors through the coordinators of that program, the Associate Academic Deans.

Students Who Have Not Selected a Major

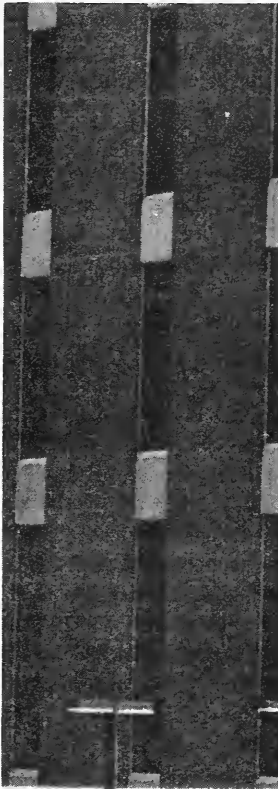
Students who have not chosen a major also need to discuss professional, and educational problems with faculty advisor. Therefore, any student without a major who needs academic advice will be assigned through the Office of the Associate Dean of Students.

COUNSELING CENTER In recognition of the principle that educational experience encompasses all aspects of human behavior, the Counseling Center has been established to help students develop social and emotional maturity.

Services of trained counselors are available to students who feel themselves to be in need of assistance in making personal, educational or career decisions. In a confidential and accepting climate, the student is afforded the opportunity to gain deeper insight into his needs and goals.

In addition to individual counseling, the center offers a program of group counseling, limited testing facilities, and extensive vocational and educational information.

The center staff participates in student and faculty activities which are concerned with the mental health of the college community.



The Financial Aid Office at Towson State College believes that it is the responsibility of both the student and his parents to pay college expenses. Financial aid may be designed to supplement, *but not replace*, these primary resources. Therefore, most of TSC's aid programs are based on the financial need of the family.

The nationally standardized procedures suggested by the College Scholarship Service (CSS) through its Parents Confidential Statement are utilized to demonstrate need. This program is based on need analysis procedures required and approved by Federal law. *Independent students* use the Student Financial Statement (SFS) and a parental statement of non-support (College Supplement Form B) to demonstrate need. Please check with the Financial Aid Office to determine if you may file as an independent student.

Application Procedures for Financial Aid Programs

Incoming freshmen should obtain the Parents Confidential Statement (PCS) from their high school counselors or from the TSC Financial Aid Office. A TSC *Form A* application supplement must be sent to the TSC Financial Aid Office before processing may be completed. Upperclassmen should apply directly to the Financial Aid Office for a renewal PCS and Form A. Independent students should submit a Student Financial Statement (SFS) in addition to the Form A and Non-Support Statement, Form B, all of which are available upon request from the Financial Aid Office. (All appropriate forms must be on file before processing begins). There is a \$3.75 processing fee for the PCS and \$3.50 fee for the SFS, payable to the College Scholarship Service at the time the application is filed. (Fees are subject to change).

All prospective freshmen and transfer students should file their TSC financial aid application when they submit their TSC admissions application although financial aid applications will not be processed by the College until the student has been offered and accepted admission. Applications for all financial aids by freshmen students should reach our Office by April 1 for the following school year. Deadline for applications by transfer students is May 1. Applications for summer should reach our Office before April 1. (Please note that 4 to 5 weeks processing time by CSS must be allowed in meeting these office deadlines). Students who are admitted as new students after April 1 may be given consideration for funds after the deadline date. After April 1, we cannot assure immediate processing nor announcement of results prior to the beginning of the school year. If funds are still available, necessity cases will be processed during the school year.

Federal Aid Programs

The National Direct Student Loan Program. (Formerly National Defense Student Loan) makes up to \$7500 in five years available on a loan basis to undergraduate students and \$10,000 aggregate for graduate students who have proven financial need. There is no interest charge on this loan as long as the student continues in at least half-time status, but there is interest of 3% beginning ten months after the student leaves school. The recipient may have up to ten years to repay the loan following his or her departure from school. Special education teachers and teachers teaching in economically and culturally deprived areas may receive a specified

percentage cancellation of principal for each teaching year up to 100%. The money cannot be received until the student is registered for the semester for which the loan is granted.

Supplemental Educational Opportunity Grants. (EOG) These are out-right grants to students with exceptional financial need. These grants may provide up to half of the actual need of the student and do not have to be repaid. The other half of the actual need *must* be met by scholarships, college loans, employment, Work-Study jobs or other aids, or the grant may not be received. Eligible students who are accepted for enrollment on a half or full-time basis may receive EOG consideration.

The College Work-Study Program (CWS) makes jobs available to students with exceptional financial need. These jobs are usually assigned as part of the "Financial Aid Package." If at all possible, students are placed in positions that are related to their academic major or special interest. Employment may be obtained in departmental offices on-campus and non-profit private or governmental agencies on a contracted arrangement off-campus.

Basic Opportunity Grants (BOG) provide grant funds to eligible students equaling the lesser of \$1400 or one-half the institution's cost minus the expected family contribution or 50-60% of the student's need. (The difference between total cost and family contribution).

The Law Enforcement Education Program (LEEP) provides loans of up to \$1800 per academic year and grants up to \$300 per semester for college studies by police, courts, and corrections employees and students preparing for careers in these law enforcement fields. Additional information and applications for LEEP can be obtained in the Financial Aid Office. Deadline for loans in April 1 for the following academic year. Deadline for grants is one month prior to registration.

The Nursing Student Loan and Scholarship Program provides financial assistance to full and part time students of exceptional need who plan to undertake courses of study leading to careers in nursing. The maximum scholarship or loan to be received is \$2500 per academic year depending upon financial need. The student must be accepted into the nursing program (usually the second semester of the sophomore year) before being eligible to apply under the Loan and Scholarship Program.

State Programs

Other Race Grant (ORG) An out-right grant for minority students, attending on a full-time basis, who are legal residents of Maryland and have financial need. These grants are usually awarded as part of the "Financial Aid Package." Applicants should follow the procedure for applying for the Federal aid programs. The deadline is April 1.

The Maryland Higher Education Loan Program is geared toward the family with less actual financial need, but who desires to utilize credit to meet college expenses. These bank loans provide up to \$1250 per year for undergraduates and \$1500 for graduate students. If the applicant can demonstrate financial need (through the financial aid application procedure) the Federal Government will pay the 7% interest on these loans as long as the student is in school



and for nine months after graduation or leaving school (regardless of reason for departure). If the applicant cannot demonstrate need, he may still qualify for the loan but not for the Federal interest subsidy. Applications may be received and must be processed by the Financial Aid Office before final arrangements for the loan are made with the bank. Further information may be received from the Financial Aid Office. There is no deadline for applying.

State Scholarships

- A. *The Teacher Tuition Waiver (Pledge)* is abolished as of October 1, 1972. Only students who signed the Pledge prior to that date may continue on the program.
- B. The state of Maryland each year awards General State and House of Delegates Senatorial Scholarships to legal residents of the state. Interested high school students should consult their school counselors. Students presently enrolled at Towson State College may obtain an application from the Financial Aid Office or the State Scholarship Board, 2100 Guilford Avenue, Baltimore, Maryland. The application deadline is December 1 for the following academic year.
- C. *War Orphan and Vocational Rehabilitation Program*. Students are entitled to financial assistance if they qualify for either of the above programs. Eligible students should report the fact immediately to the Comptroller's Office of the College.
- D. *Professional School Scholarships* are available to TSC students majoring in Nursing. Further information should be obtained from the TSC Financial Aid Office.

College Programs

Edward Moulton Fund. This fund is a short term loan fund whereby a student may borrow up to \$75.00 without interest. Applications may be secured from the Financial Aid Office. There is no deadline.

College Loan Fund. The College Loan Fund is designed to assist students on a short term basis. Loans are based on financial need and may be given up to a maximum of \$400. Loans are made at 2% interest while the student is in school. Applications may be secured from the Financial Aid Office. There is no deadline. (Regulations are subject to change). The Sarah E. Richmond Loan Fund was established by Sarah E. Richmond, who was affiliated with the College for 50 years as student, teacher, principal, and dean of women. This fund has been increased by gifts from the Alumni Association. The College Loan Fund was made by contributions from the following: the Class of 1900 Memorial to Katherine Muhlback, the Class of 1925, the Normal Literary Society, the Pestalozzi Society, the Reese Arnold Memorial, the Lillian Jackson Memorial, the Esther Sheel Memorial (Class of 1927), the Carpenter Memorial, the Eunice K. Crabtree Fund (gift of the Class of 1931), the Pauline Rutledge Fund (gift of the Class of 1934), the Pearle Blood Fund (gift of the Class of 1940), the 1933 Gift Loan Fund of Faculty and Students, the Gertrude Carley Memorial, Washington County Alumni, the Grace Boryer Downin Fund, the Class of 1941 Fund, the Martha Richmond Fund, the Towerlight Fund, the M. Clarice Berch Fund (gift of the Class of 1951), the Bettie Sipple Fund sponsored by the Maryland Federal of Women's Clubs, the Lucy



Scott Memorial Fund, the James B. O'Toole, Jr. Memorial Loan Fund, the Ellen Pratt Hamilton Memorial Loan Fund, the Rodgers Forge PTA Loan Fund in memory of Ellen Pratt Hamilton, the Mrs. Carrie Gischel Obrecht Beta Delta Loan Fund, and periodic contributions from the Alumni Association. There also exists a loan fund for music education majors and a Student Government Association Loan fund administered by the Treasurer of the S.G.A.

College Scholarships. The *Helen Aletta Linthicum Scholarships* were established by the will of Mrs. Linthicum, widow of J. Charles Linthicum, who was a member of the class of 1886. The fund is administered by the trustees of the estate and the Financial Aid Office. All entering and continuing students are eligible to qualify for these sixty awards. The *Edith C. Sheridan Scholarship*, established by Mrs. Sheridan, a member of the class of 1906, is also administered by the Financial Aid Office. One upper-class student may receive the *Minnie V. Medwedeff Endowment Scholarship*. This award is made annually to an outstanding student selected by the trustees of the fund. The scholarship was established in memory of Minnie V. Medwedeff by her father. Miss Medwedeff was an instructor in the College from 1924 until her death in 1935.

Regular Student Employment. (Other than Work-Study) positions as well as off-campus job positions are maintained on the Job Boards in the Financial Aid Office and the College Center. The on-campus jobs may be in the various areas throughout the College. Clearance from the Financial Aid Office is required. All students on the College payroll must be in good standing. The off-campus jobs are posted on the Job Boards and are received from outside organizations during the academic year and summer. These jobs include work for a variety of community agencies and stores and summer camp experiences.

HEALTH SERVICES

Health Services are maintained in a modern two-story building located on campus. For specific information, the student is referred to the Health Center Booklet which is distributed to all new students.

For more serious illnesses, the student will be referred to his or her home or hospital for definitive treatment. With the student's knowledge and consent, the staff works closely with the parents and/or family physician in all important illnesses or accidents.

The professional staff consists of college physicians, college psychiatrists, registered and practical nurses. Physician Services are available daily during office hours, and in emergency situations at any time.

A completed medical record is required of all students prior to the time of their admission. Certain exceptions may be made for those applicants whose religious principles preclude compliance and whose affiliation with an organization is official. Additional examinations are given when conditions warrant. A student is expected to correct remediable defects as soon as possible, preferably before the opening of the college year.

Annual chest X-rays or other proof of freedom from tuberculosis (i.e. a negative tuberculin test) are compulsory for all students. Health education and prevention of illness and accident are essential parts of the college health program.

The College assumes no financial responsibility for illness of sufficient seriousness to require hospitalization, X-rays, or special



treatment. The College does not assume financial responsibility for any injury incurred upon the athletic field or in any physical education class.

A student who has a physical condition which prevents complete participation in the regular physical education program may be permitted upon authorization of the College Physician and the Academic Standards Committee to take a modified program or to be exempt from physical education requirements.

Accident Insurance

For the benefit of those students who wish to participate, the College enters into an agreement with an approved insurance company to cover students against any accidental injury either at College or at home during the academic year. Participation in the plan is voluntary and costs approximately \$25.00 per year. Students desiring this coverage should make application at the Comptroller's Office.

Students planning to major in physical education or participate in intramural activities are required to enroll in the insurance program.

Mental Health

Psychiatric services are available to all students without charge at the campus Mental Health Service. Psychiatrists from Sheppard Pratt Hospital are in offices at the Health Center every day for appointments with students who wish to see a psychiatrist for brief consultation or short-term therapy. Often problems can be resolved quickly, but psychological testing, longer-term therapy, or other referrals can be arranged if needed.

All contacts with the Mental Health Service are entirely confidential. Students may make their own appointments by contacting the Health Center nurse in person or by telephone.

In addition, the Mental Health Service is available to work with various groups on campus in regard to mental health concerns in specific areas or in the college community as a whole. Students who wish to have psychiatric collaboration or participation in their activities may feel free to request this service by contacting the Supervisor of the Mental Health Service, at the Health Center.

ORIENTATION

The purpose of the Orientation program is to help the student make the optimal educational choices, to help him or her explore possible ways of reducing anxieties about coming to college, and to familiarize the student with some of the policies, college services, and options that are available to a member of the Towson State College community.

To accomplish these goals, a student attends an orientation session. The student takes the *Self-Directed-Search*, a self-scored educational and vocational guidance instrument; then discussion groups about relevant fields of study and plans for the future are held.

In connection with the Advising program, possible courses of study are discussed with student and faculty advisors in a free and open type atmosphere.

There are also on-going group discussions about problems the student may face in coming to college, led by students especially trained in Leadership.

The options a student has are discussed — e.g., opportunities for switching majors, for spending less or more than four years at college or for helping change policies.

Thus Orientation is an opportunity for the students to learn about Towson State, to examine his or her goals and to discuss them with faculty and other students in an open, supportive situation.

RESIDENCE PROGRAM



The purpose of the Residence Program is to provide living facilities for full-time undergraduate students and to provide educational programs and activities which supplement the academic mission of the college. The Residence Staff and the elected executive councils of the Resident Student Government Association strive to maintain an environment conducive to the individual's achievement of academic goals and development of self-reliance and leadership. The elected Resident Student's Judicial Board handles cases involving violation of college policies. Upon recommendation of the Judicial Board and its acceptance by College authorities, a student may be required to leave residence.

A referral service for off-campus housing is provided through the Residence Office. Students in need of off-campus housing may obtain listings of rooms and apartments available in the Towson area.

Priority for campus residence is given to students who reside beyond a twenty-mile radius of any four-year state institution. Priority for space assignment is given to students participating in the Living-Learning programs.

All resident students must sign a yearly contract for college housing. Acceptance to residence is on a yearly basis, and not for the duration of a student's college career. A student who withdraws from residence forfeits his reserve space but may reapply should he wish to return.

Residence facilities are available to students only when classes are in session. No student is permitted to remain in residence more than forty-eight hours after he has ceased attending classes.

Additional information may be found in the brochure, *Housing at Towson State College*, and the publication, *Handbook for Residence Living*.

CAREER PLANNING AND PLACEMENT

The Placement Office is a centralized service for all departments of the college. The purpose of the Placement Office is to assist all students of Towson State College in securing employment.

The Placement Office furnishes occupational and vocational information and provides career counseling for all interested students, arranges for an on-campus recruiting program to bring employers to the campus to meet the students, informs students of job opportunities, and keeps on file credentials for all students utilizing the services of the Placement Office.

COLLEGE CENTER

The complexity of society, campus bureaucracies, advances in communication, increasing enrollments, professional pressures on faculty, and changes within individuals are producing impersonal communities of intellectuals. The College Center facilities are designed to overcome the impersonalization of the large college, serving both as an educational center for out-of-class activities and also as



a service center. The College Center as a program is organic, vital, changing, and alive. The Center houses educational and cultural programs of value for the entire academic community, which complement programs offered in the classroom. The Center is also the place where resident and commuting students can establish their social activities, relax, and make the out-of-class time in their lives meaningful. The College Center displays, through its facilities and programs, to its various publics the character of the institution it serves.

The first level of the three-story brick structure includes a Snack Bar, Bookstore, Vending Area, Post Office, Dry Cleaning Service, Locker Rooms, Music and Study Lounge, T.V. Lounge, Billiards and Games Room, and eight bowling lanes. The second and main level of the building includes a cafeteria, a Special Dining Room and Lounge, Art Gallery, spacious main lounge area, student organization offices, campus reservations offices, College Box Office and College Center administrative offices. The third level of the building contains the Studies Skills Center, eight conference rooms, a photographic laboratory, a reception lounge, and a large multi-purpose room which is divisible into three sections. Covered deck areas, lobbies, patios, and fountains round out the Center.

Although many may come to the Center for food, it differs from other campus buildings in the following respects: Individuals for the most part must choose to come to the Center. The activities housed in the building are extra-curricular and voluntary. The students participating in special interest or governmental groups have an opportunity to experiment, assume responsibility, interact with the faculty and administration and by so doing come to know more about themselves and the College.

College Box Office

The College Box Office Manager provides students, faculty, and administrators with a discounted ticket service to the local theaters. The manager will arrange for the purchase of any tickets for recognized groups on campus. The Manager also handles the student sponsored activity tickets and arranges for off-campus travel of student groups.

Post Office

The Post Office is located on the first level of the College Center. A resident students and commuter students who desire are assigned a mailbox and combination to that box.

College Book Store

The College Book Store is located in the College Center and carries a complete line of books, trade fiction, non-fiction paperbacks, reference, technical, and course outlines and aids.

Also for sale are general school supplies, typewriters, leather goods, college clothing, gifts, records, and toiletries. The College Store also carries a complete line of art supplies and a wide selection of arts prints. Framing materials are also available.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association is the governmental organ of the student body. It is an integral part of the college community and is recognized as a contributing organization in the overall government of the College.

Upon enrollment at Towson, each full-time student automatically becomes a member of the SGA. The organization consists of an executive committee, composed of the President, Vice President and Treasurer of the SGA and various appointed officers, and a Student Senate composed of eighteen senators elected from each class.

The broad objectives of the SGA are outlined in the Preamble of the Student Government Association Constitution:

1. To improve student awareness and welfare.
2. To foster the recognition of the rights and responsibilities of students.
3. To personally fulfill those privileges of self-government.

The activities of the Student Government Association primarily concern the educational experience of the student, as a member of the College community, both in and out of the classroom. These activities are justified in a collegiate setting by the extent to which they contribute to the educational experience of each student. All students are invited to aid the SGA in their expressed goals and objectives.

STUDENT ORGANIZATIONS

Groups of students may feel free to meet in campus facilities. In order to be recognized as a College organization, however, their constitution must be approved by the SGA.

Recognized student groups include music organizations, honorary societies and fraternities, organizations related to an academic field, political organizations, religious organizations, service organizations, social fraternities, athletic organizations, and special interest organizations.

Student publications are: Talisman, a literary magazine; Towerlight, the weekly official student newspaper; Tower Echoes, the yearbook; Gold and White, the official student handbook; the Journal of International Affairs; the Student Telephone Directory and the Who's Who of Student Leaders.

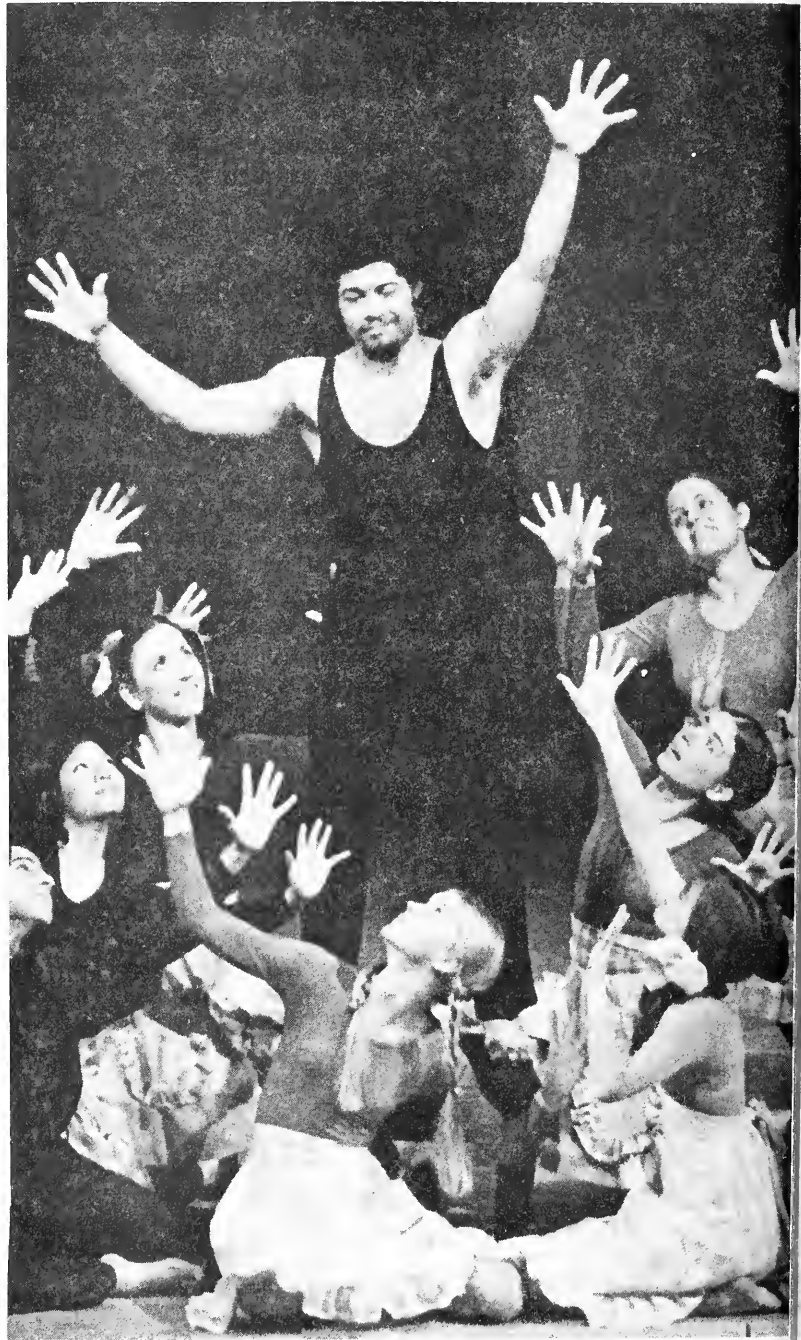
Athletic Activities

Towson State College is committed to comprehensive intercollegiate and intramural athletic programs for men as integral parts of the student's total educational experience. An opportunity is provided for all students who desire to participate. The College is a member of the National Collegiate Athletic Association and the Mason-Dixon Conference. The varsity schedules include many of the finest universities and colleges in the East. Competition on the varsity level includes football, soccer, cross country, basketball, wrestling, swimming, gymnastics, baseball, lacrosse, tennis, track and golf. Facilities and leadership are provided for intramural sports during all seasons. Students are encouraged to participate according to their interest.

The Women's Physical Education Department and the Women's Athletic Association promote an active sports program for all women enrolled at Towson State College. The intramural and varsity program is organized to include a variety of activities: archery, bad-



minton, basketball, bowling, dance, fencing, field hockey, golf, gymnastics, lacrosse, softball, swimming, tennis and volleyball. Special events conducted by the Women's Athletic Association each year include: dance recitals, ski trips, camping outings, and the annual banquet.



Academic Regulations

REGISTRATION

Each student is assigned a time to register. Students are not permitted to attend classes without having completed registration. A late registration fee is assessed for registering after the time assigned and within the late registration period. Students are expected to discharge all financial obligations to the institution before being permitted to register.

TRANSFER CREDIT

Credit is accepted for a course completed at any accredited college or university if it is equivalent to a course taught at Towson State College or acceptable as an elective and if the final mark is "C" or higher. This credit will count toward graduation but will not be used in computing the academic average required for graduation. Transfer students may obtain specific information from Director of Admission. Towson State College students must obtain prior approval from Academic Standards Committee.

CREDIT HOURS

The unit of credit is the semester hour. It is defined as one 50-minute class per week (or its equivalent) for one semester. A three-hour class meets three 50-minute periods or two 75-minute periods a week for one semester. Laboratory and studio classes normally require two or three hours in class as the equivalent of one semester hour. Two hours of preparation is usually necessary for each hour in class for the average student.

PROGRAM TRANSFER

Students in good standing in either the teacher education or the arts and sciences program may transfer to the other program by filing a request form with the Registrar, as Secretary to the Academic Standards Committee. Upon approval of the Academic Standards Committee, the transfer will be effective for the semester following the one in which the request is made.

Those wishing to transfer to the arts and sciences program will be obligated in the amount of \$100 for each semester of work completed in the teacher education program if the teaching pledge was signed in lieu of tuition payment.

EXEMPTION FROM REQUIRED COURSES

Believing that students should not be required to devote time to courses the substances of which they have mastered, the College provides opportunity to qualify for exemption from required courses. Towson students may apply through the Dean of the College to be examined for exemption, from courses required of all students and those required in a major field. The department concerned and the Director of Research and Testing cooperate in the evaluation. When exempted, the student is privileged to choose an elective in any department or an advanced course in the same department. Required courses in the following fields are at present involved in this plan: biology, English, geography, mathematics, music, speech, history, political science, and sociology. Credit for Experience and Previous Learning is an option also open to students. See Admission, page 11.

STUDENT LOAD

The normal student load is 15-18 semester hours of credit each semester.

Students may take up to 19 semester hours for credit. It is suggested that students possess a minimum cumulative average of 2.00 to take 18 semester hours and a cumulative average of 2.50 to take 19 semester hours.

Students with a 3.25 cumulative average based on at least 30 hours taken at Towson State College may carry 20 hours. In his last semester of his senior year a student may carry 20 semester hours provided the number is necessary to be graduated and provided his cumulative average is 2.50 or better.

Students with a 3.50 cumulative average or better, based on at least 30 hours taken at Towson State College may carry 21 hours.

No student will be permitted to carry more than 21 hours or less than 12 hours except by special permission of the Academic Standards Committee.

Students must have the approval of the Registrar to register for more than 19 semester hours during any one semester.

AUDITING COURSES

A student may audit a course with the permission of the instructor of the course. No credit may be earned in a course which is audited. Audited courses will not appear on the student's record. Students who wish to take the course for credit may do so only during the Change of Schedule Period as an added course.

CHANGE OF COURSE SCHEDULE

All changes in a student's schedule of courses (adding or dropping a course or a change in sections or credits) are valid only if the student completes the Course Schedule Change Form and files it with the Registrar. Failure to do so will result in a grade of "NC" in the course dropped and no credit in the course added. The grade will appear on the Grade Roster of the course, the student's Permanent Record.

No student may enter a class after the first week of classes. Exceptions to this will be considered only after approval of the department chairman of the course involved and the Dean of the College.

Entering freshmen wishing to obtain waiver of courses for the honors plan may arrange to take Advanced Placement Tests of the College Entrance Examination Board in fields in which they feel qualified. Arrangements to take these examinations in May of the high school senior year may be made through the school counselor or through the College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey.

WITHDRAWAL FROM A COURSE

Students wishing to drop a course may do so as follows:

Students may drop up to the end of the first two weeks of classes and no grade will be recorded.

Students who have not dropped a course at the end of the first two weeks of classes may withdraw from a course up to three weeks after the mid-semester date. Students withdrawing during this period will have the grade of "W" recorded for the course. This grade may be removed by repeating the course.

Students registered for a course who do not drop or withdraw during the periods referred to above must receive grades of A, B, C, D, NC or I as determined by the faculty member.

CLASSIFICATION OF STUDENTS

Students are classified according to the number of semester hours passed as follows: freshmen, 0-30 semester hours; sophomores, 30-60 semester hours; juniors, 60-90 semester hours; seniors, 90 semester hours or above.

MARKING AND POINT SYSTEM

A four-point system is used to identify quality of academic work. The letter "A" designates work of superior quality; "B", work of good quality; "C", work of satisfactory quality; "D", work of less than satisfactory quality but allowable for credit, subject to the restrictions under the Degree Requirements; "NC", work of such unsatisfactory quality that no credit is given. The mark of "S" (Satisfactory) or "NC" is given for non-credit courses or student teaching. The mark of "PA" (Pass) or "NC" (No Credit) is given for the courses elected on the Pass Option. The mark of "PE" is given for courses passed under the Credit for Experience or Prior Training option. All grades are recorded on the student permanent record.

A mark of I, (*incomplete because of illness or other reason beyond control of student*) at the end of a semester carries no credit. Unless such a course is satisfactorily completed within six months of the last day of class for the course, the grade for the course becomes "NC". It is the responsibility of the student to make arrangements to complete course requirements for the removal of the "I".

In computation of grade point averages the following quality point values are used:

A—4 quality points	C—2 quality points
B—3 quality points	D—1 quality point

Grades of "I", "NC", "PA", "PE", "W" and "S" are not used in computation of averages.

The grade-point average is computed by multiplying the hours of credit in a course by the points assigned to the grade earned in the course. Totaling the credit hour points for all courses passed in the semester, and dividing the total number of points by the total number of hours of credit passed yields the grade-point average for the semester. For example:

4 hours of A	(4 points each)----	16 points
4 hours of B	(3 points each)----	12 points
3 hours of C	(2 points each)----	6 points
3 hours of D	(1 point each) ----	3 points
2 hours of NC	(No Credit Given)	
14 Total hours passed		37 Total points

Dividing 37 by 14, the student's grade-point average for this semester is found to be 2.64.

The student's cumulative grade-point average is found by dividing the total points earned in all courses completed at Towson by the total number of credit hours passed (including hours attempted prior to 1 September 1970) at Towson. For example: a junior has passed 76 credit hours and has earned a total of 190 points. His cumulative grade-point average is 2.50.

A cumulative grade-point of at least 2.00 is required for graduation.

STANDARDS OF WORK REQUIRED

Philosophical Premises

Academic Standards are set to insure that a degree from Towson signifies student work meeting or exceeding a particular level of excellence.

The intent is to reinforce appropriate learning behavior, and to help the student work independently and develop intellectually in a variety of ways.

Repeating of Courses

Students may repeat any course only once where credit has been earned or a mark of "NC" or "W" has been awarded. When the course is repeated, the student will receive the credits for the course counted once and the higher of the two grades if repeated for the first time after 1 September 1970. Students repeating courses must indicate this at the time of registration. Upon completion of the repeated course a change of grade form must be submitted to the Registrar by the student concerned. The lower of the marks earned is not maintained on the student permanent record. Courses taken for which credit is received with a letter grade may not be repeated under the pass/no credit option.

STANDARDS FOR FULL-TIME STUDENTS

In order to remain in the college, a student must possess the required minimum credits in relation to semesters of study as indicated in Table I and have a cumulative grade point average as indicated in Table II.

Table I
REQUIRED MINIMUM CREDITS THAT MUST BE PASSED
IN RELATION TO SEMESTERS OF STUDY

Semester of Study	Required Minimum Credits Passed
Two	18
Four	40
Six	66
Eight	96
Ten	Degree requirements must be completed

Table II
MINIMUM GRADE POINT AVERAGE TO BE IN COLLEGE

Credits Passed	Minimum GPA To Be in College	Minimum Level of Satisfactory Progress
1-15	1.00	1.85
by 20	1.25	1.85
by 30	1.50	1.85
by 40	1.67	1.95
by 50	1.78	1.95
by 64	2.00	2.00

TRANSFER STUDENTS

The expected minimum number of credits passed for transfer students will be determined by dividing the number of credits transferred in by 15, rounding the answer to the nearest lower whole number, and relating it to Table III. (Required Minimum Credits Passed for Transfer Students) For instance, a student transfer





ring 64 hours would start at the 4 Semesters of Study point on the scale ($64 \div 15 = 4.27$). To meet the minimum credits passed after two semesters of study, he would be expected to have passed 66 credits at the end of six semesters of study.

In addition, at the end of the first semester, transfer students must earn a grade point average as shown in Table II above based on total credits passed. However, no student will be required to earn more than a 1.50 grade point average during the first semester. In succeeding semesters a transfer student must attain a grade point average as shown in Table II. (For instance, a student who is required to have earned 52 credits at the end of two semesters at Towson should be required to have earned a 1.78 or better at that time to remain at Towson.)

Table III
REQUIRED MINIMUM CREDITS ACCUMULATED
FOR TRANSFER STUDENTS

Semester of Study	Required Minimum Credits Accumulated
1	9
2	18
3	28
4	40
5	52
6	66
7	80
8	96
10	Degree requirements must be completed

PASS OPTION Students will be able to elect on a voluntary basis 12 credits toward their degree for which they may be graded on a pass/no credit basis. No more than six hours per semester can be taken on a pass/no credit basis. This option is not available for courses required for the major and for certification in Teacher Education unless special permission is sought from the department. The option must be elected during the first two weeks of classes. The Registrar will make this information available to the instructor upon request.

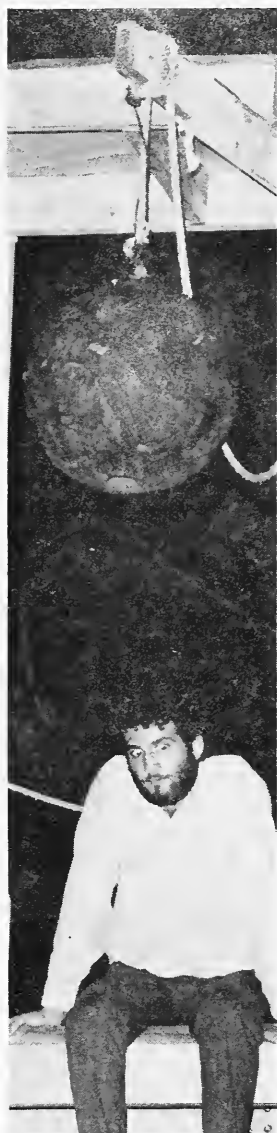
PROCEDURES FOR REINSTATEMENT

Those no longer in good standing may appeal for reinstatement. In most cases students who are dismissed for academic purposes will be expected to remain out of the day school for two semesters. Those students who bring their cumulative average up to the credits completed and GPA Norm by taking courses in the Evening, Summer Program and January Session are eligible for reinstatement; however, a student must take courses in which letter grades are given in order to have this work apply before the completion of the one year period. A student must achieve an average of 2.00 on all work taken during the period of academic dismissal. Up to 18 credits can be taken in the Evening and Summer Program for this purpose. Deadline for readmission is 15 July and 15 November.

In evaluating requests for reinstatement, the Academic Standards Committee, without changing previous policies, will weigh heavily an indication of improved performance.

The personal development of each student is considered. The College may exercise its right to ask a student to withdraw at any time.

DEGREE REQUIREMENTS



GENERAL COURSE REQUIREMENTS OF ALL STUDENTS

Bachelor of Arts Degree

Those wishing to qualify for a Bachelor of Arts degree may do so by fulfilling the requirements for the Bachelor of Science degree and by completing the intermediate course or the equivalent of a modern foreign language.

Bachelor of Science Degree

A student who satisfactorily meets the following requirements will receive the Bachelor of Science degree.

1. A minimum of one hundred twenty-eight hours and a maximum of one hundred forty-four hours of college credits of which thirty-two hours must be upper division work.
2. Credit in the courses required of all students.
3. Credit in the required courses of the curriculum he has elected.
4. Successfully complete a major except for those in Early Childhood or Elementary Education.

With prior approval of the Standards Committee, a student may substitute an interdisciplinary program designed to meet his particular objectives.

A mark of "C" or higher is required in all courses taken in the department and applied toward the major or minor of that department. If this standard is not attained, the student must repeat the course or substitute another course in the field at the direction of the department.

5. A cumulative average of at least 2.00.
6. Record of attendance at the College for at least one academic year during which thirty semester hours of credit were earned.
A student is expected to earn his final thirty credits at the College unless he receives special permission to the contrary.
7. Demonstration of personal qualities which are expected of an educated person.
8. File with the Registrar a Graduation Application according to following schedule:

December Graduates: file by May 31st of the year of graduation.

June Graduates: file by September 30th of the year of graduation.

August Graduates: file by July 1st of the year of graduation.

The new general course requirements went into effect in September 1969, and affect all incoming freshmen and transfer students. However, Towson State College returning students have the option to remain on the plans under which they were admitted or elect to follow the new plan as follows.

All students are reminded that the adoption of a new set of General College Requirements does not change their departmental requirements, or the requirements for State certification of teacher education students. Students should consult their advisors if they have any questions regarding their degree programs.

Group

Group I

Disciplines of Art, Drama, English, Modern Languages (the first semester of any elementary course can not be used) Music, Philosophy and Religion, Speech (at least two, but no more than three courses must be in the English Department; and no more than one course can be taken in any one of the other disciplines)

6

Group II

Disciplines of Biological Sciences, Mathematics, Physical Sciences, Psychology (no more than one course can be taken in any one discipline)

3

Group III

Disciplines of Economics, Geography, History, Political Science, Sociology, (courses must be taken in at least three of these disciplines)

4

Group IV

Disciplines of Physical Education, Health (at least one course must be in Physical Education area)

2

The requirements for a Bachelor of Arts degree are the same as those listed above for the Bachelor of Science degree plus 12 hours or the equivalent in one foreign language.

OPTIONAL GENERAL
EDUCATIONAL
PLANS

Optional general education plans are permissible under certain circumstances when approved by the Curriculum Committee. Additional information available in the Office of the Registrar.

ATTENDANCE

Students are expected to attend all classes. Each faculty member sets his own policy on absences. Policies vary and it is the responsibility of the student to understand clearly the absence policy of each instructor and to act accordingly. Students are expected to notify the Dean of Students by phone or in writing of any absence exceeding three days.

LENGTH OF
ATTENDANCE

Only in unusual cases may a student who has completed degree requirements remain in the College for longer than eight semesters. Any requests for deviation from this plan must be submitted to the secretary of the Committee on Academic Standards.

WITHDRAWALS

A student wishing to withdraw from the College is to obtain a withdrawal card from the Office of the Dean of Students. Before the withdrawal is official, the student must submit the completed withdrawal card to the Office of the Registrar. The student will be marked according to grading policies if the withdrawal occurs during a semester.



SEMESTER OF STUDY

Each semester a student registers and has not cancelled or withdrawn prior to the first day of class counts as a semester of study.

Withdrawal for medical reasons or entry into the Armed Forces will not count as a semester of study. The student must inform the Registrar upon readmission in such cases and present evidence of reason for withdrawal.

Those students withdrawing from the College who intend to return must comply with the deadlines established for readmission—15 July for the fall semester and 15 November for the spring semester.

TRANSCRIPTS OF ACADEMIC RECORD

Transcripts will be sent only upon written request of the student. Transcript request forms may be obtained at the Office of the Registrar. The College requires at least two weeks notice for issuance of a transcript record. A fee of \$1.00 will be assessed for each request.

A student with an outstanding indebtedness to the institution will not be eligible for transcripts of record.

HONORS PROGRAMS

Under the direction of a College Honors Programs Board, a number of departments of the College offer Honors Programs in their disciplines or cooperatively offer interdisciplinary Honors Programs. The student who completes an approved program will receive a diploma with the designation Bachelor of Arts or Bachelor of Science with honors in the appropriate discipline.

The program is developed for the junior and senior years and includes 9 to 12 semester hours credit in seminars, directed readings, and research projects. A senior thesis is required as well as an oral defense of the thesis. A candidate will also be expected to make a respectable showing on the Graduate Record Examination.

To be admitted to the program a student must present a cumulative average of 3.0 and a 3.25 cumulative average in his discipline. To graduate from the program the recipient of an Honors degree must present a 3.0 cumulative average and a 3.5 cumulative average in his discipline.

Details of the departmental plans may be obtained from the office of the department chairman.

Graduation with Honors

To receive a bachelor's degree with honors, a student must have completed work taken at Towson State College with the following cumulative grade point average:

3.75 to 4.00 Summa Cum Laude

3.50 to 3.75 Magna Cum Laude

3.25 to 3.49 Cum Laude

Students must have, in addition, a 3.25 or better average for work completed at other institutions and a minimum of 60 semester hours of work at Towson State College. If students meet all other requirements, the Academic Standards Committee will hear an appeal of the 60 semester hour rule.

Transfer students eligible for Summa Cum Laude awards based on work completed at Towson State College must be approved by the Academic Standards Committee.

To receive a bachelor's degree with honors in a discipline, a student must have completed a departmental honors program and be recommended for honors by that department.



The College Curriculum

THE ARTS AND SCIENCES PROGRAM

The arts and sciences program at Towson offers opportunities of higher education to those who are interested in obtaining a broad, liberal education. Students in the arts and sciences program may pursue courses leading to further preparation for a variety of careers. In some professions, such as law and medicine, it is usually advisable to complete a four-year liberal arts course before beginning professional study. In others, students should plan to transfer to a professional school after one or two years, unless the professional school's admission plan permits a longer period of pre-professional study.

Those who decide it is appropriate to enter professional study should study carefully the catalogue of the institution which they wish to attend in order that they may select the Towson courses required for admission to the professional program.

A foreign language should be elected by those wishing to earn a Bachelor of Arts rather than a Bachelor of Science degree.

The following paragraphs outline how the liberal arts curriculum can provide basic preparation for several professions or vocational fields. Students may obtain further information from their advisers and from the chairman of the department in which the major or most of the preparatory study is to be taken.

Students who look forward to graduate work should make early selection of the school they hope to enter in order that they may meet the entrance requirements of the chosen institution. Current catalogues of graduate and professional schools are on file in the Admissions Office. The Dean of the College has additional data on opportunities for advanced study, including available fellowships and scholarships.

Business

A four-year course in business administration is offered to the individual who is interested in a business career or who wants a business background for admission to a graduate or professional school.

College Teaching

The future college professor should build a strong undergraduate major in his chosen field and prepare for graduate study leading eventually to the Doctor of Philosophy degree. Inquiry should be made at several graduate schools with a view to meeting their entrance requirements. Preparation for reading proficiency in French or German should be begun as soon as possible in the undergraduate program.

Foreign Service

A student considering a career in the Foreign Service of the Department of State, or other overseas programs should plan a curriculum emphasizing a good general education, with particular attention to the use of the English language with skill and fluency, to a foundation in economics, geography, government and modern



history, and to reading with comprehension and conversing with intelligibility in at least one modern foreign language of general utility. The Department of State now requires of all candidates both a written and oral examination in French, German, or Spanish. Mastery of additional foreign languages enhances a candidate's value to the Service.

Conservation, Wildlife and Forestry

Broadly educated persons interested in outdoor life and possessing a strong background in the biological sciences are desired by government, industry and universities having graduate programs in these areas. Programs of study may be planned with the aid of the biology department in accordance with the needs of the student.

Mass Communications

Students interested in careers in broadcasting, journalism, film or public relations are able to select a Mass Communications major. This major provides the student with a broad background upon which they can then specialize. Additional courses in various liberal art fields such as the Social Sciences, Psychology, History and English are desirable.

Law

Students interested in admission to a law school should make an excellent academic record in a wide variety of liberal arts courses. Their preparation should develop the ability to write, speak, and understand clearly, but preparation in any particular field can be left to the particular interest of the individual student. Therefore, a "major" in "pre-law" appears ill-advised and it is recommended that students interested in admission to law schools contact the pre-law advisor in the department of Political Science and discuss with him whether in their particular case an existing departmental major is advisable or whether it might be better that a liberal arts major with the thematic option of "pre-law" be worked out to fulfill the students particular needs and interests.

In general, students who have a definite interest in entering the legal career should become members of the "pre-law council," where they can discuss their objectives and needs with interested faculty members and fellow students. They can cooperate in this manner to foster a better general understanding of our legal system in other students and in the college community. The "pre-law council" will also attempt to keep its members current on conditions for admissions to law schools and on any career questions which might be of interest.

Library Work

Prospective librarians should plan for a four-year program of arts and sciences followed by a one-year graduate course in a school accredited by the American Library Association. A good undergraduate record and a reading knowledge of at least one foreign language are customary requirements for admission to a degree



program in library science. Prospective librarians may prepare for positions in which they would work primarily in the subject matter area of their special interest.

Medicine and Dentistry

A student expecting to graduate from Towson State College before entering professional school can meet the general admission requirements of a number of medical and dental schools by completing a major in biology plus two years of chemistry, and two years of English, mathematics, physics, and French or German. Electives may be chosen in health education, social sciences, English, and fine arts. The student who expects to transfer to a medical or dental professional school after three years at Towson is advised to consult the catalogue of the school to which he expects to apply to make sure that he meets the entrance requirements of that school. The following pre-professional course pattern is suggested for consideration along with the requirements of the professional school to be attended:

First Year

		<i>Hours</i>
Engl 30.102	Freshman Composition -----	3
Biol 14.101	Contemporary General Biology -----	4
Biol 14.109	Functional Anatomy of Vertebrate -----	4
Chem 22.101-102	General Chemistry -----	8
	Modern Language -----	6
	*Electives -----	2 to 6
	Total -----	32 to 31

Second Year

		<i>Hours</i>
Engl 30.204-205	Literature -----	6
	Modern Language -----	6
Phys 66.211-212	General Physics -----	8
Chem 22.231-232	Organic Chemistry -----	8
	*Electives -----	2 to 6
	Total -----	32 to 34

Prospective medical and dental students should also consult with a biology faculty member as early as possible upon admission to Towson to plan a course program to meet the admission requirements of the professional school chosen by the student.

Ministry

In addition to complete devotion to his vocation, the prospective minister, priest, or rabbi should possess or acquire academic ability, sympathy for and skill in working with people, facility in writing and speaking, and broad knowledge in several fields. As a college student he should be active in his church or synagogue and in a campus religious organization. A four-year course in arts and sciences is required for admission by most theological schools. Most of the eight or more years of study for the Roman Catholic priest-

*Electives chosen from such courses as College Algebra; History of Western Civilization; Introduction to Sociology; Government of the U.S.; Health Educ.; Public Speaking; Modern Lang.; Art in the Culture; Music Appreciation; General Psych.



hood takes place in a seminary. More information may be sought from the student's minister, priest, or rabbi.

Medical Technology

A student interested in Medical Technology should consult with Dr. Carl Henrikson, Biology Department, as early as possible upon admission to Towson to plan the course program required. For description of the program, see Biology Department.

For those taking pre-professional work prior to studying medical technology, a three-year course leading to a biology major is the recommended minimum. This is followed by twelve months of clinical training in a hospital.

Nursing

The Department of Nursing offers a baccalaureate program for preparation of the professional nurse practitioner. Graduates of the College with a major in Nursing receive the Bachelor of Science Degree and are eligible to take the examination offered by the Maryland State Board of Examiners of Nurses for licensure as a Registered Nurse.

The four-year program provides for completion of the College's general education requirements; foundational courses in the physical, biological and social sciences, as well as the nursing offerings. The latter are heavily concentrated in the Junior and Senior years and include both classroom and clinical learning opportunities.

For additional information concerning the program, refer to Nursing Department.

Personnel Work

Personnel work in educational institutions and psychological testing positions may sometimes be entered directly from college, but a graduate degree is usually required. Personnel work is a field in which work experience is important, particularly in industry and business, and one in which there is keen competition for starting positions. In addition to the general college requirements, the following suggestions are made: a major or minor in psychology, courses from the following areas: sociology, economics, and political science.

Pharmacy

Although a four-year college course is desirable as background for admission to a pharmacy school, two years of college is usually sufficient. Basic requirement of a typical pharmacy school would be met by a Towson student completing two years of work as outlined in the pattern that follows:

		<i>First Year</i>	<i>Hours</i>
Biol	30.102	Freshman Composition	3
Math	50.115	Math I	3
Phed	*101-159	Physical Education	2
Biol	14.101	Contemporary General Biology	4
Biol	14.105	General Botany	4
Engl	14.101-102	General Chemistry	8
		**Electives	0 to 3
		Total	24 to 27



THE TEACHER EDUCATION PROGRAM

		Second Year	Hours
Engl	30.204-205	Literature	6
Phys	66.211-212	General Physics	8
Chem	22.211	Analytical Chemistry	4
Econ	24.202	Economic Principles & Problems	3
Hist	40.145-146	History of the United States	6
PoSc	68.206	American National Government	3
		**Electives	2 to 6
		Total	33 to 36

A student interested in pharmacy should also consult with a biology faculty member as early as possible upon admission to Towson to plan a course program to meet the admission requirements of the pharmacy school chosen by the student.

Physical Therapy

The minimum requirements for admission into an approved school of physical therapy is sixty credit hours of college work, including eight credit hours in biology or zoology, six credit hours of college work, including eight credit hours in biology or zoology, six credit hours in physics and/or chemistry, and six hours in psychology. A list of approved schools and their admission requirements may be obtained from The American Physical Therapy Association, 1790 Broadway, New York 19, New York.

Public Administration

A student expecting to enter some field of public service (such as federal, state or local governmental organizations as administrators) should choose a major in the social science area suited to his objectives. Courses in political science, economics, sociology, psychology and business administration are recommended.

Social Work

Although social welfare agencies employ many individuals who have a four-year college education, leaders in the field consider two years of graduate education desirable. Undergraduate courses suggested include economics, political science, history, psychology, sociology, statistics, biological sciences, literature, public speaking, and news writing. Volunteer service with youth serving organizations and summer employment in social agencies are recommended for the college student interested in this vocation.

Towson has been preparing teachers for the public schools of Maryland for more than one hundred years. Out of this long experience have come the present three programs for teachers, directed toward three-grade-levels; early childhood education (pre-school through the third grade), elementary (first through sixth grades), and secondary (seventh through twelfth grades).

Professional education courses, comprising about twenty percent of the four years' work, consist of approximately two-thirds

*Prefix coed 60, men 61, women 62.

**Electives chosen from such courses as College Algebra; History of Western Civilization; Introduction to Sociology; Government of the U.S.; Health Educ.; Public Speaking; Modern Lang.; Art in the Culture; Music Appreciation; General Psych.



classwork at the College and one-third laboratory experiences, including student teaching in the classrooms of public school systems. Prior experience with children is strongly recommended for those seeking admission to student teaching.

Approximately forty percent of the college program is given over to studies of a general nature — in the humanities, the social sciences, and the natural sciences — providing a well-rounded college education. Certain basic courses are required, assuring foundations in all broad areas of knowledge; but even among these there are frequent choices, and beyond them is the opportunity for electives that make possible the pursuit of special interests.

The balance of the four years' work, approximately forty percent, is given over to electives which permit the student to develop competency in the field in which he will eventually teach or to pursue his special interests.

In general a student with a minimum of a 2.0 cumulative average is eligible to enter student teaching when (a) he has completed the required freshman and sophomore courses; and (b) he has completed all professional prerequisites. He must in addition have the approval of the Director of Laboratory Experiences to enter and remain in the student teaching program.

The teacher education program may lead directly to positions such as: nursery and kindergarten teaching, primary grade teaching, upper elementary teaching, junior and senior high school teaching, college teaching, special educational teaching, guidance work in schools, and librarianships in schools and public libraries.

With experience and additional training, graduates of the teacher education program may become administrators such as supervisors, principals, and superintendents.

Other vocations and areas of work in which teacher education graduates enter include: social work, religious education (including the ministry of education and the ministry of music), personnel work, recreation work, educational TV, audio-visual education in the schools and in business and industry; industrial education, programmed instruction in business and industry as well as in the schools, the field of testing in education and in business and industry, and educational positions in governmental agencies.

Required courses for each area and suggested course sequences are listed under each area in the Education Department course descriptions.

Teaching Certificates

Each graduate of a teacher education program at Towson will be qualified for Maryland certification at the early childhood education, elementary, or high school level. Early childhood education graduates may teach nursery school, kindergarten, and grades one, two, and three. Elementary education graduates may teach grades one through six and they may teach an academic subject in grades seven, eight, or nine, provided they meet the content requirements for a secondary school certificate in this subject. Secondary school graduates may teach in grades seven through twelve, and grades six when departmentalized. The Standard Professional Certificate is



issued for three years at graduation and is renewable for seven years upon completion of six semester hours of graduate or advanced undergraduate courses.

The Towson graduate program affords opportunity to qualify for the Advanced Professional Certificate. Thereafter a master's degree or "equivalent" is required for the Advanced Professional Certificate. Certification to teach in Baltimore City is based in part upon the passing of a professional examination.

General College Requirements for Bachelor's Degrees

All degree programs of the College are based upon a fundamental background of general studies. Work in four area disciplines of liberal arts or general education courses are required of all students working toward the Bachelor of Science or Bachelor of Arts degrees. Additional courses in general education are required of prospective early childhood and elementary school teachers; but it is possible, and sometimes desirable, to pursue a major in an academic field. Students pursuing a program in secondary education are required to complete a major in addition to required education courses.

Specialization

A major in an academic field is earned by completing about eight courses, generally, beyond the basic required courses in the chosen field—or about 36 credit hours of work, the exact amount being set by the various departments. Three possible benefits make the pursuit of a major course of study desirable: it prepares the student for graduate study in the field; it prevents a possible too-wide dispersion of effort which would result in a lack of real competency in any branch of knowledge; it qualifies the graduate from the teacher education program to teach the subject in junior and senior high schools.

Students may select a major or approved department program from one of the following fields; art, business administration, biology, chemistry, economics, elementary education, elementary school science, English, geography, history, high school science, early childhood education, mathematics, modern foreign languages, music education, physical education, physics, political science, psychology, philosophy, sociology, social science, speech and dramatics, speech education. The required courses for programs are listed with department course descriptions.

Students are responsible for meeting in full the requirements for graduation as set forth in the College Bulletin. When the requirements are changed after a student has enrolled in the College, the student has the option of meeting in full the requirements that were in effect at the time of entrance or those that are in effect at the time of graduation, if graduation occurs within seven years of date of admission. If the student does not complete graduation requirements within seven years he must meet requirements in effect at the time of graduation. When the College withdraws former required courses, the Standards Committee will approve substitutions for students graduating under the former requirements. The student's advisor assists in the planning of a program, but the final responsibility for meeting the requirements for graduation rests with the student.



FOREIGN STUDY

Students with upperclass standing desiring to pursue study in a specialized academic area at a college or university outside the United States must make application and obtain College approval for the study program. The appropriate form for making application may be obtained at the Registrar's Office. Approval is gained through the department chairman of the academic area involved, who will assist the student in the selection of a program satisfactory to the department. For final approval, the department chairman will forward the proposed program to the Academic Standards Committee through the office of the Dean of the College. After the student has returned to the College, transfer credit for a program of study undertaken outside the United States will be granted only upon recommendation of the department chairman and after an evaluation has determined the student's successful completion of the program.

THE COOPERATIVE EDUCATION PROGRAM



The Cooperative Education Program at Towson State College is designed to foster an interchange of students between Towson State and the other State Colleges of Maryland as well as other institutions of higher learning in the Baltimore Metropolitan area. The institutions included in the program are the State Colleges at Bowie, Coppin, Frostburg, Morgan, Salisbury, and the University of Maryland, Baltimore County; and the private colleges, Goucher and Loyola. The program is also designed to allow students to take courses not ordinarily available at Towson as well as study under eminent professors in residence at other institutions. Students are encouraged to develop their academic curriculum with the Cooperative Education Program as an important part of their plans.

There are no additional costs to the student to participate in the Cooperative Program.

Students desiring information concerning the Cooperative Education Program should consult with the Coordinator of the Cooperative Education Program. Cooperative Education Program applications, participating college bulletins and class schedules are available from the Coordinator, the Assistant Registrar.

Academic Requirements

Students participating in the program are expected to maintain the same degree of proficiency in their academic studies at the cooperative institution as at Towson State.

Courses taken at the cooperative institution are part of the student's academic record, and the grades will be computed into the student's grade point average at Towson.

Only students who are in good standing academically in an undergraduate or graduate degree program are eligible to participate in the Cooperative Education Program.

Programs With Coppin, Morgan, and UMBC

The public Colleges in the Baltimore metropolitan area are Coppin, Morgan and UMBC. Students are especially encouraged to select courses from the curriculum of these two schools, since they are within easy commuting distance of Towson State.

Undergraduate (except freshmen) and graduate students are eligible to participate in the Cooperative Program. Undergraduate students may pursue courses of instruction equivalent to three semesters of fulltime work (54 credit hours). Graduate students

are limited to 12 credit hours. Students can take an entire semester's academic load or any part of it at either Coppin, Morgan or both while in attendance at Towson.

Specially arranged courses are also offered to permit greater freedom of choice, especially those courses either taught by eminent professors or not ordinarily available at Towson.

Students may elect courses offered either in the day or evening.

Programs With The State Colleges — Bowie, Frostburg, and Salisbury

Students are encouraged to make use of the academic curriculum available at Bowie, Frostburg, and Salisbury. Distance precludes simultaneous part-time attendance at Towson and one of the other colleges. However, students can spend three full semesters at any one of the three colleges. Undergraduate students can elect up to 54 credit hours, and graduate students can elect up to 12 credit hours.

Programs With The Private Colleges — Loyola and Goucher

Towson has a Cooperative Education Program with both Loyola and Goucher. Undergraduate students (except freshmen) are eligible to participate in this program. Students are permitted to take only those courses which are not offered at Towson. Students interested in either Loyola or Goucher should consult with the Coordinator of the Cooperative Education Program.

STUDY SKILLS SUPPORT SERVICES CENTER

In recognition of the fact that not all students manage to achieve in college without study skills support, the Study Skills Support Services Center has been established to assist minority and other students in developing methods of study and study skills proficiency.

Professional language arts personnel and student tutors are available to students who experience the need for assistance in developing adequate academic readiness. In an environment which is conducive for study and at the same time relaxed enough for healthy conversation, the students are afforded the opportunity to grow academically.

In addition to individual tutoring, the center offers seminars and experimental courses in English and Reading.



JANUARY SESSION

Beginning in January, 1972, Towson offered its first Minimester or January Session.

Courses may be of the traditional lecture or discussion type, or they may be entirely new and experimental. They may be a combination of old and new. Courses hopefully will cover a narrower, more topical range of subject matter than most courses offered during the regular semester. Independent study, directed readings, travel study, practicums, and other courses that could lend themselves to a concentrated, full-time effort by a student would be appropriate for a Mini-Term.

Credits for the Minimester will be equivalent to credits earned during the regular semester. Each student is limited to one course during the Mini-Term, carrying a load of from one to three credits. This restriction is intended to preserve the Mini's main feature: The opportunity to concentrate on one educational theme without the competition of other courses or other teaching responsibilities.

Special students and part-time degree candidates may be admitted to the January session, however, the College Center fee will be assessed for these students.

Fees will be assessed on a per-credit basis plus a registration fee payable at the time the student registers for a course.

Faculty and students who choose not to participate in the January session would have the period covered by the Minimester free—for research, study, travel or work.



Graduate Studies

Wilfred B. Hathaway, Dean of Graduate Studies
Frederick C. Arnold, Associate Director of Graduate Studies
Golden E. Arrington, Coordinator, Music Education Program
Grayson S. Burrier, Coordinator, Secondary Education Program
Norman R. Diffenderfer, Coordinator, Geography Program
Regina I. Fitzgerald, Coordinator, Elementary Education Program
Joseph P. Gutkoska, Coordinator, Reading Program
Billy D. Hauserman, Coordinator, Urban Teaching Program
Theodora R. Kimsey, Coordinator, Early Childhood Education Program
Fredericka Kundig, Coordinator, Biology Program
Charles Lonegan, Jr., Coordinator, Speech Pathology and Audiology Program
Stuart Miller, Coordinator, General Psychology Program
John B. Mitchell, Coordinator, Art Education Program
Edward Neulander, Coordinator, Guidance and Counseling Program
Barbara Slater, Coordinator, School Psychology Program
Robert Z. West, Coordinator, Audiovisual Communications Program

PROGRAMS AND PURPOSES

The Master of Arts degrees in Geography, General Psychology, and School Psychology and the Master of Science degrees in Audiovisual Communications, Biology, and Speech Pathology and Audiology are intended to develop further specific knowledge in the respective fields. It is the intent of these programs to enable students to meet their needs through the flexibility within each program.

The programs leading to the Master of Education degree have been developed primarily to help school teachers and guidance counselors increase their competency in the following general areas:

Art Education	Music Education
Early Childhood Education	Reading
Elementary Education	Secondary Education
Guidance and Counseling	Urban Teaching

GENERAL ADMISSIONS POLICY

Admission to the Graduate Division at Towson State College is granted to all applicants whose academic and personal qualifications give promise of success in graduate study. The Board of Trustees of the State Colleges has established the requirement that admission to the State Colleges shall be determined without regard to race, color, religion, or sex.

All students seeking admission to a graduate degree program must file an "Application for Admission to Graduate Studies" prior to first enrollment and have official transcripts of all college work sent to the Graduate Division. Transcripts must be sent directly from the institutions attended to the Graduate Office at Towson State College. Programs have the option of requiring additional admissions devices (including the Graduate Record Examination Aptitude and/or Advanced Tests and the Miller Analogies). Students should consult the Graduate Division for information concerning specific programs.

Students for whom English is a second language must take the Test of English as a Foreign Language (TOEFL) and submit the scores to the Graduate Division prior to first enrollment.

ADMISSION TO COURSES FOR GRADUATE CREDIT*

An applicant for admission to courses for graduate credit (classification: Graduate Student) must meet admission requirements in one of two ways: 1) By holding a Master's or Doctor's degree from a regionally accredited college or university, 2) By holding a Bache-

* e.g., safety and driver education courses do not receive graduate degree credit.



CANDIDATES FOR DEGREES AT OTHER INSTITUTIONS

COURSES FOR POST- BACCALAUREATE WORK (NON-DEGREE PROGRAMS)

lor's degree from a regionally accredited college or university, a grade average of 3.00 ("B") and an acceptable score on the Aptitude portion of the Graduate Record Examination, if required by the program. At the option of the coordinator the grade requirement may be satisfied by a "B" average in one of the following areas of the applicant's undergraduate academic record: a) The complete record of four years' work, b) The most recent 60 hours of course work, c) The courses making up the undergraduate major and minor if the student plans to continue his studies in these same fields. The quality of graduate work taken beyond the Bachelor's degree, either as post-baccalaureate (non-graduate credit) courses or graduate credit courses, will be evaluated as part of the undergraduate record. Recommendations from persons who can appraise the student's academic qualifications may be required.

All required application credentials (see General Admissions Policy) must be filed with the Dean of Graduate Studies no later than August 15 for the Fall Semester, January 1 for the Spring Semester, or May 15 for the Summer Session to be considered for admission. Those who are admitted as Graduate Students may register for courses numbered 100-699, but will receive graduate credit only in graduate level courses numbered 300-699 completed with grades of "C" or better. Certain experimental courses approved by the Graduate Studies Committee may receive graduate credit. Service Courses* and several 300-level and 400-level undergraduate prerequisite courses are not given graduate credit. In order to maintain the classification of Graduate Student, a good academic record must be achieved even if the student is not in a degree program.

A student who is a candidate for an advanced degree at another college or university may enroll as a Graduate Student at this college for occasional work. He must present, at least two weeks before registration, a letter from the Graduate Dean of his parent institution indicating that he is in good standing and that credit earned at Towson State College is acceptable towards his degree.

Students who do not meet the standards required for classification as Graduate Student are permitted to register with the classification of Non-Graduate Student and pursue non-degree programs. Those students receiving Non-Graduate standing are eligible to take courses at the 100-level through the 400-level, but receive graduate credit only in courses numbered 300-499 and listed in the current bulletin as "Undergraduate and Graduate."

Non-Graduate Students pursuing non-degree programs at the post-baccalaureate level, however, must file the appropriate application.

Students who believe they can meet the admission requirements for Graduate Student standing but who fail to file the required application credentials in advance must register as Non-Graduate for the semester. However, they will be considered for admission to Graduate Student standing if their application credentials are received by the college before the end of the first quarter of the semester. If they are admitted to Graduate Student standing they will then be permitted to receive graduate credit for satisfactory completion of any 300-level and 400-level graduate courses (except Serv-

* e.g., safety and driver education courses do not receive graduate degree credit.

ice Courses* and several undergraduate prerequisite or specifically senior courses) in which they may be enrolled. Approval for course work beyond one semester will not be given until the application credentials are received.

GRADUATE WORK BY SENIORS AT TOWSON STATE COLLEGE

Seniors in their last semester of work at Towson State College may take 300-level and 400-level courses for graduate credit and 500-level and 600-level courses if they meet the following requirements: 1) The graduate courses must be in excess of the 128 hours required for the Bachelor's degree, 2) An application to the Dean of Graduate Studies for Graduate Student classification (which requires a 3.00 average), submitted in advance for specific graduate courses (by August 15 for the Fall Semester, January 1 for the Spring Semester, and May 15 for the Summer Session) must be approved. 3) The student must submit all required application credentials (see General Admissions Policy) and receive Graduate Student Standing prior to receipt of graduate credit for satisfactory completion of the courses, and prior to initiation of further course work.

CONDITIONAL ADMISSION

Conditional Admission may be granted to those students whose academic achievement falls short of the standards required for Graduate Student standing but whose records show promise on several other grounds.

Other factors which will be considered in determining whether an applicant should be granted Conditional Admission are: 1) academic average in all collegiate work must be at least 2.30 in one or more of the areas of the student's record listed above in "ADMISSION TO COURSES FOR GRADUATE CREDIT." 2) The quantity and quality of teaching or counseling experience in the field in which he plans to major as a Graduate Student. In addition, recommendations from persons who can appraise the student's academic qualifications and professional experience may be required.

The student granted Conditional Admission must complete two specified courses with the grade of "B" or better in each course. The courses must be completed within one year of admission and may be used towards the degree when applicable.

Students admitted conditionally are enrolled as Non-Graduate Students.

REQUIREMENTS FOR THE MASTER'S DEGREE

The requirements for the Master's degree are contained in the current "Towson State College Bulletin: Graduate Studies, 1972-1973," and may be obtained from the Graduate Office.

TRANSFER CREDIT

The following regulations govern the transfer of credits from other regionally accredited colleges:

1. A maximum of six transfer credits for graduate courses taken prior to enrollment at Towson State College is allowed if the student is initially admitted to Graduate Student Standing at this college and if the courses are relevant to the student's major.
2. Transfer credit after a student has attained Graduate Student Standing may be permitted if the student applies in writing to the Dean of Graduate Studies for permission prior to taking the course. Normally, approval will be given only for courses which are not

* e.g., safety and driver education courses do not receive graduate degree credit.

offered by Towson State College during the period of the student's attendance.

a. A maximum of twelve transfer credits may be allowed for graduate work satisfactorily completed at the State Colleges: Bowie, Coppin, Frostburg, Morgan, and Salisbury.

b. A maximum of six transfer credits may be allowed for graduate courses completed at accredited colleges or universities not listed above. Permission for these credits can be granted only if the student has not transferred courses taken prior to entrance at Towson State College.

3. The total accumulation of transfer credits from all courses listed in 1 and 2 above may not exceed twelve.

4. All transfer credits must be completed with a grade of "B" or higher and must remain within the total span of seven years allowed for completion of degree requirements.

ADMISSION PRIOR TO RECEIVING BACCALAUREATE DEGREE

Admission of applicants whose required application credentials are incomplete because the baccalaureate degree has not yet been conferred may be **granted** to seniors in their last semester of work. Evaluation will be **made** on the basis of their undergraduate work through the first semester of the senior year. Standing granted in the pre-degree category is at the option of the Graduate Program Coordinator to enable the student to begin work in courses carrying graduate credit immediately upon completion of the senior year. The applicant must have all application credentials completed during the first month after classes begin in the semester he initiates his course work. Admission standing is subject to cancellation or change if the admission credentials remain incomplete or do not meet the requirements for admission. If admission as a Graduate Student is denied, the student will be required to withdraw from any 500-level or 600-level course for which he has registered. Continuation of students in courses below the 500-level will be permitted.



Course Descriptions

The Meaning of Course Numbers

Each department of the College has one or more code numbers and abbreviations for each general subject area (e.g., French in the Modern Language Department). The code abbreviations are shown in parentheses at the head of the course listings. The code numbers form a two digit Subject Classification Number, which precedes a three digit Course Classification Number, forming a five digit Course Number. Each course has a distinctive number, with the following significance:

Course Classification Numbers

.001-.009

.010-.099

.101-.299

.301-.499

.501-.699

Significance of Numbers

Two Year Experimental Courses.

Service Division Special Courses with credit and Service Courses with no credit.

Lower Division Undergraduate Courses.

Upper Division Undergraduate and Graduate Courses, as noted.

Graduate Division Courses.

Sequential Courses

Semesters of a year course whose numbers are separated by a hyphen are to be taken in sequence. When course numbers are separated by a comma, either semester may be taken independently of the other. (See Prerequisites.)

Elective Courses

Students majoring in the various areas will need to choose their electives with extreme care. Before registering for courses which are not required students should consult their advisers. The advice of the instructor in the course or the chairperson of the department in which the elective course is listed may be needed before a wise decision is made concerning the choice of an elective.

Credit Value of Courses

The semester credit value of the course is indicated in the parentheses following the title.

Time of Offering

All required courses are usually offered each semester. Elective courses in each department are usually offered at least one semester each year. All non-required courses are offered subject to sufficient enrollment.

Prerequisites

The order in which courses may be taken is determined by the prerequisites of all courses to be taken. (See Sequential Courses).

Art

Professors: MITCHELL, ZINDLER, MILLER

Associate Professors: GUILLAUME, POLLACK, MONTENEGRO, CUBBISON, NASS

Assistant Professors: FLOOD, SUPENSKY (Chairman), JACOBSON, FIX,
PAULSEN, GILCHRIEST

Instructors: ROBB, OUNDJIAN, DENNER, COHEN, DAVIS, LADD, PITMAN, JOYNER

Understanding the principles of art gives a vital insight into understanding the world around us. The Art Department provides the student with essential elements of education related to the visual and plastic arts. A variety of undergraduate programs is offered plus a graduate program in art education.

Art Major

All prospective art majors and minors must register with the Art Department as early as possible during the first year on campus. The purposes of a major in art are to provide a background for personal creativity, to prepare for graduate work, and to provide a foundation for a career in art. Required courses are: 12.103, 12.104, 12.111, 12.121, 12.122, 12.229, 12.230, 12.231, 12.240 or 12.241 and a course in Graphic Processes.

In addition, art courses are required to reach the minimum total of 42 credits. Transfer students must take half the total required art credits with this department. Participation in the annual student exhibit is required. The department reserves the privilege of retaining student work, including rights of reproduction and publication.

Art Education Major

The department offers dual certification only (Elementary and Secondary Level) for teaching certificates in art. All courses and statements for the art major apply also to the art education major. These plus 12.225, 12.475, 12.479, Educ. 28.319, Psychology 70.203 must precede student teaching. Proseminar 12.455 is taken concurrent with student teaching (26.497-27.398). Students may register for "Methods" (12.475-12.479) and student teaching only if at least half the studio-art history requirements were taken in this department. Education 27.401 is also required for certification.

Art Minor

Students who wish a minor in art should select the following courses: 2.103, 12.111, 12.121 or 12.122, 12.229, 12.240, plus additional art electives to total at least 20 credits.

The Arts and Sciences Program

For general information please refer to the Arts and Sciences program in this bulletin. Students who wish to select art as their "core" of concentration must take the following courses: 12.103, 12.104, 12.105, 12.111, 12.121 or 12.122. Students in this program must register with the Art Department.

ART COURSES

Experimental

12.001 WORKSHOP IN EXPERIMENTAL ART FORMS (3) The creation of new and experimental art forms through the investigation of light, sound, video tape, lasers, environments, events, etc. Prerequisites:

Written consent of instructor. May be re-elected.

12.009 THE ART OF CHINA (3) A survey of the development of Buddhist art and archi-

ecture as they were introduced from India, and Chinese painting, sculpture, porcelain and the ritual bronzes, slide lectures, directed readings and independent study course kits. Prerequisite: 12.121, 12.122 or consent of instructor.

- 12.010 THE ART OF JAPAN (3) A survey of the development of Buddhist art and architecture in Japan and the formation of indigenous art forms such as narrative scroll

Lower Division — Undergraduate

- 12.102 FUNDAMENTALS OF DESIGN FOR NON-ART MAJORS (3) Elements and Principles of design and aspects of their application.

- 12.103 TWO DIMENSIONAL DESIGN (3) Elements and Principles of two dimensional design and aspects of their application. Studio & discussion.

- 12.104 THREE DIMENSIONAL DESIGN (3) An introduction to three dimensional concepts as they relate to the elements and principles of design. Form and space problems involving various materials, tools and techniques.

- 12.105 ART IN THE CULTURE (3) A study of art and its relation to man's culture, historically as well as a strong emphasis on contemporary western culture. Slide lectures to include a broad media of art forms, readings and museum visits.

- 12.106 DRAWING AND PAINTING FOR NON-ART MAJORS (3) An introductory course for non-art majors. Studio experience in drawing and painting. Critiques and museum visits.

- 12.111 DRAWING AND THE APPRECIATION OF DRAWING I (3) Problems of expressive draftsmanship in a variety of media. Drawing from the costumed and nude figures, still life and landscape.

- 12.121 PREHISTORIC TO MEDIEVAL ART (3) An historical survey of art. Slide lectures, directed readings and museum trips.

- 12.122 RENAISSANCE TO CONTEMPORARY ART (3) An historical survey of art. Slide lectures, directed readings and museum trips.

- 12.202 ADVANCED DESIGN (3) The application of aesthetic principles to graphic and plastic problems. Emphasis on independent investigation. Prerequisites: 12.103, 12.104.

- 12.205 THE ART OF PUPPETRY AND MARIONETTE PRODUCTION (3) Design and construction of puppets and marionettes; adapting plays, stories, and events; designing and constructing scenery; lighting; production.

- 12.206 ARCHITECTURAL CONCEPTS (2) The organization of space and materials for human needs. Contemporary and historical aspects of the design of private and public buildings and of communities. Lectures and Discussion.

painting, screens, and wood-block prints. Prerequisite: 12.121, 12.122 or consent of instructor.

- 12.012 PRACTICAL APPLICATION IN KILN CONSTRUCTION (3) Theory and practice in kiln construction. Instruction in materials related to kiln construction. Discussion of firing techniques, safety factors and basic heating and refractories information

- 12.211 DRAWING II (3) Continued studio work in drawing; landscape, still life and figure. Prerequisite: 12.111.

- 12.213 LIFE DRAWING AND ANATOMY (3) The study of anatomical structure of the human figure for art students. Drawing from the nude and draped model. Prerequisite: 12.111.

- 12.215 PROJECTIVE DRAWING (2) Methods of perspective, orthographic and isometric projections. The use of various media in the rendering of three dimensional form.

- 12.220 EXHIBITION TECHNIQUES (2-3) The practical and theoretical problems involved in museum and gallery installation of art works. Includes study of past exhibition techniques and observation of contemporary methods. Directed museum trips. Prerequisite: 12.103, 12.104 or consent of instructor.

- 12.221 GREEK AND ROMAN ART (3) Studies in architecture, the decorative arts and sculpture, slide lectures, readings and museum visits. Prerequisite: 12.121.

- 12.222 BYZANTINE TO GOTHIC ART (3) Studies in architecture, the decorative arts and sculpture, slide lectures, readings and museum visits. Prerequisite: 12.121.

- 12.223 ITALIAN RENAISSANCE ART: 15TH-16TH CENTURIES (3) Studies in architecture, painting and sculpture, slide lectures, readings and museum visits. Prerequisite: 12.121 and 12.122.

- 12.224 THE BAROQUE AND 18TH CENTURY (3) Studies in European architecture, painting and sculpture of the period. Slide lectures, readings and museum visits. Prerequisite: 12.122.

- 12.225 DESIGN FOR COMMERCIAL ART (3) Drawing, painting, lettering and typography as visual communication. Prerequisite: 12.103.

- 12.227 DESIGN IN WOOD AND METAL (3) Studio problems in functional design with emphasis on metal smithing and woodworking techniques. Prerequisites: 12.103 and 12.104.

- 12.229 OIL PAINTING AND RELATED MEDIA I (3) Varied approaches to painting and a variety of media (e.g. acrylic, encaustic, oil painting) are explored through demonstration and experimentation. Prerequisites: 12.103 and 12.111.

- 12.230 **WATERCOLOR AND RELATED MEDIA I** (3) Varied approaches to watercolor and a variety of media (e.g. gouache, casein, watercolor) are explored through demonstration & experimentation. Prerequisite: 12.103 and 12.111.
- 12.231 **CERAMICS I** (3) Creative investigation of ceramic materials with an emphasis on the potter's wheel. Studio work, lectures and discussion on ceramic design, techniques and materials. Prerequisite: 12.103, 12.104 or consent of instructor.
- 12.234 **DESIGN: THE PHOTOGRAPH IMAGE** (3) A comprehensive investigation into the technique and aesthetic of still photography.

Upper Division — Undergraduate and Graduate

- 12.314 **THE ART OF ENAMELING ON METAL** (3) Design as applied to the art of enameling on copper and silver. The appreciation of master works of enameling from medieval to contemporary times. Studio work and lectures. Prerequisites: 12.103, 12.104.
- 12.318 **JEWELRY** (3) Investigation into aesthetics, history, function and design of jewelry. Lecture and directed studio problems in forming, joining and finishing of metallic and non-metallic materials. Prerequisite: 12.103 and 12.104 or consent of instructor.
- 12.323 **PICASSO TO THE PRESENT** (3) Art History with emphasis on painting from 1900 to the present. Slide lectures, directed readings and museum trips. Prerequisites: 12.121 and 12.122.
- 12.324 **HENRY MOORE TO THE PRESENT** (3) Art History with emphasis on sculpture from 1900 to the present including new media and happenings. Directed readings and museum trips. Prerequisites: 12.121 and 12.122.
- 12.325 **FRANK LLOYD WRIGHT TO THE PRESENT** (3) Art History with emphasis on architecture from 1900 to the present including time-space concepts. Prerequisites: 12.121 and 12.122.
- 12.326 **FABRIC DESIGN** (3) Design problems executed with fabric. Instruction in tie dying, batik, block printing, silk screen on fabric. Prerequisites: 12.103, 12.104 or consent of instructor.
- 12.328 **WEAVING AND FIBER CONSTRUCTION** (3) Design problems executed in fibers and fabrics. Instruction in loom and hand weaving, macrame, stitchery, rug hooking. Aesthetic and historical considerations. Prerequisites: 12.103, 12.104 or consent of instructor.
- 12.329 **OIL PAINTING AND RELATED MEDIA II** (3) Continued studio experiences in painting. Prerequisite: 12.229 or consent of instructor. (Not for Graduate Credit)
- 12.330 **WATERCOLOR AND RELATED MEDIA II** (3) Continued studio experiences in painting. Prerequisite: 12.230 or consent of instructor. (Not for Graduate Credit)

Students must have a camera with adjustable diaphragm and shutter. Prerequisite: 12.103, 12.104 or written consent of instructor.

- 12.240 **SCULPTURE: THE HUMAN FIGURE** (3) An introduction to the use of the human figure in sculpture. Clay modeling from the nude, with experience in direct plaster modeling and plaster casting. Prerequisites: 12.103, 12.104.
- 12.241 **SCULPTURE: CONTEMPORARY MEDIA AND CONCEPTS** (3) Technical and aesthetic considerations in the use of current sculptural concepts and media, including lights, kinetics, sound, plastics, etc. Prerequisites: 12.103, 12.104.
- 12.331 **CERAMICS II** (3) Continued studio experience in ceramics. Assigned problems utilizing a variety of clay construction methods plus independent work. Lectures and discussion including clay mixing, glaze application and kiln operation. Prerequisite: 12.231. (Not for Graduate Credit).
- 12.334 **ADVANCED PHOTOGRAPHY** (3) Continued research with the photographic aesthetic. Emphasis on independent investigation. Student must have camera with adjustable diaphragm and shutter. Prerequisite: 12.234 or written consent of the instructor based on demonstration of technical competence.
- 12.339 **METAL SCULPTURE** (3) Conceptual and technical problems involved in forging, forming, welding, soldering and finishing both ferrous and non-ferrous metals. Prerequisite: 12.240 or 12.241.
- 12.340 **SCULPTURE STUDIO** (3) Continued studio experience with emphasis on modeling and carving with a variety of materials: plasters, cements, epoxies, wood, stone, etc. Prerequisites: 12.240 or 12.241.
- 12.347 **SCREEN PROCESS** (3) Personal expression in traditional and experimental techniques of screen printing: Serigraphy in color, tusche, stencil, glue. Prerequisites: 12.103, 12.111 or consent of instructor. (Not for Graduate Credit)
- 12.349 **RELIEF PROCESS** (3) Personal expression in printmaking: Woodcut, wood engraving, linocut, subtractive color printing and other relief processes. Prerequisite: 12.103, 12.111 or consent of instructor.
- 12.371 **ART AND THE CHILD** (2-3) Major considerations of art education appropriate to the work of the elementary teacher; experiences with art materials. (Not for Graduate Credit).
- 12.405 **ART PRINCIPLES AND CRITICISM** (3) Principle concepts of art; theories of perception and aesthetics; application of theories to the interpretation of specific works or art. Prerequisite: 12.105 or 12.121 or 12.122.

- 12.414 ADVANCED STUDIO (1-4) Practice for advanced students in their field of special interest. May be re-elected to a total of four credits. Prerequisite: Must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements with instructor of his choice.
- 12.415 ADVANCED STUDIO (1-4) Practice for advanced students in their field of special interest. May be re-elected to a total of four credits. Prerequisite: Must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements with instructor of his choice.
- 12.431 ADVANCED CERAMICS (3) Individually designed studio problems for advanced students in ceramics. Prerequisite: 12.331.
- 12.433 ADVANCED PAINTING (3) Individually selected studio problems for advanced students in area of special interest. Prerequisite: 12.329.
- 12.440 ADVANCED SCULPTURE (3) Individually selected studio problems for advanced students in their area of special interest. Prerequisite: 12.340.
- 12.449 INTAGLIO PROCESS (3) Personal expression in printmaking: Etching, drypoint, aquatint, engraving, and other intaglio processes. Prerequisite: 12.103, 12.111 or consent of instructor.
- 12.451 LITHOGRAPHIC PROCESS (3) Personal expression through printing from Litho stones and plates. Prerequisite: 12.103, 12.111 or consent of instructor.
- 12.455 PRO-SEMINAR IN THE TEACHING OF ART (3) A professional seminar for Art Education majors. Discussion of problems in the current teaching experience. Prerequisite: Permission of Department. Concurrent with student teaching.
- 12.461 INTRODUCTION TO ART THERAPY I (3) A survey of the concepts and procedures of creative expression in the service of personal understanding and development. Consideration of educational, rehabilitative and psychiatric settings. Lectures, discussion, workshops, and readings. Prerequisite: At least junior standing as a major in Art, Psychology, Health, Mental Health or associated fields. Approved work experience in one of the above fields.
- 12.462 INTRODUCTION TO ART THERAPY II (3) Continuation of Art Therapy I, the work of the therapist. Case studies, observations and participation in a variety of settings. Discussion, field work and readings. Prerequisite: 12.461 or consent of instructor.
- 12.471 ADVANCED ART EDUCATION (3) Art education problems at all levels; materials and skills in relation to classroom needs. Prerequisite: 12.371 or equivalent.
- 12.475 TEACHING ART IN THE ELEMENTARY SCHOOL (2) Concurrent course with 479, Art in the Secondary School. For course description see 479. Open only to Art Education Majors. Prerequisite: Approval of Art Department.
- 12.479 TEACHING ART IN THE SECONDARY SCHOOL (2) Theoretic basis of art education, the function of the art specialist, and instructional materials and skills. Concurrent course with 475. Open only to art education majors. Prerequisite: Approval of Art Department.
- 12.485 SEMINAR IN ART HISTORY (3) Intensive analysis of a defined historical period or stylistic development in art. Directed readings in both period and contemporary sources. Discussions and museum tours. Variety in content each year, may be re-elected. Prerequisite: 12.121 and 12.122 or consent of instructor.

Graduate Division

- 12.511 DRAWING (3) Advanced problems in expressive draftsmanship. Prerequisites: 12.211 or consent of instructor.
- 12.514-515 GRADUATE STUDIO (1-4, 1-4) Independent work in field of special interest with weekly criticism by staff. May be re-elected to total of four credits each course. Prerequisite: Must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements with instructor of his choice.
- 12.529 OIL PAINTING (3) For students with previous experience in painting, consideration of current trends and styles; studio work, museum visits, lectures. Prerequisite: 12.329 or equivalent.
- 12.530 WATERCOLOR (3) Consideration of current trends and outstanding painters and styles. Studio work, museum visits, lectures. Prerequisites: 12.330 or consent of instructor.
- 12.531 CERAMICS (3) Advanced work in ceramic design and techniques of glazes, clay bodies, firing. Prerequisites: 12.331 or consent of instructor.
- 12.540 SCULPTURE (3) For students with previous experience in sculpture; consideration of current trends and styles; studio work, museum visits, lectures. Prerequisites: 12.340 or 12.241 and 12.339 or consent of instructor.
- 12.551 GRAPHICS: INTAGLIO, RELIEF (3) Studio work for artists with basic knowledge of intaglio and/or relief processes. Aspects of mixed media explored. Prerequisites: 12.349 or 12.449 or equivalent.
- 12.553 GRAPHICS: LITHOGRAPHY, SERIGRAPHY (3) Studio work for artists with a basic knowledge of lithography and/or serigraphy. Prerequisites: 12.347 or 12.451 or equivalent.
- 12.595 RESEARCH IN ART AND ART EDUCATION (3) Methods of research applicable

to art and art education. Examination of recent research in this field. Students will explore areas of their choice. Prerequisites: Consent of instructor.

12.697 SEMINAR IN ART EDUCATION (3) Investigation of problems in art education and related fields; Examination of theories of art and art education. To be taken as final

course in master's program. Prerequisite: 12.595 and consent of instructor.

12.699 ART THESIS: CREATIVE PROJECT (3) If approved, student will pursue his project resulting in an exhibition of his work plus a paper defining the project's scope and philosophy. Prerequisites: 12.697 and consent of the department.

The Art Department offers a variety of highly specialized courses during the minimester session.

Pending final approval, regular additional courses will be offered in the Art Department as follows: Color Photography, Street Art and Metalsmithing. Contact the Art Department for complete information on new courses.

The following art education courses are supervised by members of the art faculty. Course descriptions will be found under the Education Department.

26.487 STUDENT TEACHING IN ELEMENTARY SCHOOL ART.

27.398 STUDENT TEACHING IN SECONDARY SCHOOL ART.

Arts and Sciences

Coordinator: CHARLES C. ONION

The Arts and Sciences Majors are proposed to offer the student an opportunity to cultivate his interests in the Arts and Sciences, to seek out his own cultural heritage, to pursue his education by following a thematic plan, and to develop a capacity for intellectual adventure and cultural awareness. There are two majors, each with a thematic option:

MAJOR A — The Liberal Arts and Sciences Major constructed around a “core” discipline in the traditional Liberal Arts and Sciences fields.

MAJOR B — The General Studies Major in the Arts and Sciences constructed around a “core” discipline in General Studies, which incorporates all of the Arts and Sciences.

THEMATIC OPTION — A student may fulfill the requirements for either Major A or Major B by substituting a thematic plan for the “core” discipline. We recognize that it is possible for Major A to be constructed out of Major B. We have made a formal distinction, however, because we wished both to create a major which preserves the concept of “liberal” arts and sciences in its traditional and widely understood meaning, and also to create a major (B) which offers maximum freedom of choice. In this way, a student who elects the former will carry a distinctive label.

Major A — The Liberal Arts and Sciences Major

1. The student must satisfy General Education Requirements.
2. To declare the major, the student must be a sophomore or junior with a 2.0 CPA.
3. From the Liberal Arts and Sciences — Art, Biology, Chemistry, English, History, Modern Languages, Mathematics, Music, Philosophy, Physics and Theatre — the student must take a minimum of 54 semester hours of upper division course work. These 54 hours must include work from a minimum of 4 different departments. Eighteen credits must be from the Arts and 18 credits from the Sciences (Mathematics being considered a Science).
4. At least 18, but no more than 24, of the 54 upper division hours must come from one discipline which shall serve as the “core” discipline in the student’s program.

Major B — The General Studies Major in the Arts and Sciences

1. The student must satisfy General Education Requirements.
2. To declare the major, the student must be a sophomore or junior with a 2.0 CPA.
3. From the Arts and Sciences, which are construed to be the following — Art, Biology, Chemistry, Economics, English, Geography, History, Modern Languages, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Sociology, Speech and Theatre — the student must take a minimum of 54 semester hours of upper division course work. With the approval of the student’s advisor and the appropriate associate dean, courses in departments not listed above may be allowed if these courses are needed to complement the student’s program.
4. At least 18, but no more than 24, of the 54 upper division hours must come from one discipline which shall serve as the “core” discipline in the student’s program.

Thematic Options to the Arts and Sciences Majors

With the approval of his advisor and the appropriate association dean, a student may elect to substitute a thematic plan for the "core" discipline in either Major A or B. By following this plan the student could develop an academic concentration in areas such as urban studies, American studies, environmental issues, etc.

Except for the following, the requirements will be the same as for Major A or B:

1. A minimum of 18, but not more than 24, of the 54 upper division hours must relate specifically to a chosen topic or theme.
2. All course work must be on an upper division level unless the faculty advisor approves the inclusion of some particularly significant course work at the lower division level. For example, a course important to the student's theme may exist only at the lower division level.

LAW ENFORCEMENT AND CORRECTION

A new thematic option entitled, Law Enforcement and Correction is now being offered. Among its objectives are the following:

1. To provide in-service law enforcement and correctional personnel the opportunity to further their education beyond the junior college with a minimum loss of credits from their junior college program.
2. To provide an interdisciplinary degree with a strong emphasis on sociology, psychology and political science.
3. To provide the community with law enforcement personnel who are able to make good value judgment, to maintain their perspective, to understand underlying causes of human behavior, and to communicate clearly and precisely.

The specific requirements of this thematic option will consist of the following upper division courses to be taken at Towson State College or a cooperative school:

Business Administration: 6 credits from the following: Business Management, Business Law I, Business Law II, Personnel Management, Accounting I or Accounting II.

Geography: 6 credits beyond Elements and must include one of the following: Urban Geography or Zoning and Planning.

Health: 6 credits beyond Current Health Problems. Must include Drugs in the Culture, and Sex Education and Family Living.

History: 6 credits beyond U.S. I and II. May include The City in American History, History of Black America, The Immigrant in American History, Constitutional History of the U.S. or Social History of the U.S.

Political Science: 9 credits including Public Administration, Urban Government and Politics, Introduction to Law or Constitutional Law.

Psychology: 12 credits beyond General Psychology and Mental Hygiene. May include Personality, Adolescent Psychology, Abnormal Psychology, Interviewing Techniques, Social Psychology, and Foundations of Rehabilitation Counseling.

Sociology: 12 credits beyond Introduction, Juvenile Delinquency, and Criminology. May include Minority Groups, Collective Behavior, Social Welfare, Community Organization, Urban Sociology, Social Deviance, and Cultural Anthropology.

AMERICAN STUDIES

Purpose:

The American Studies concentration within the General Studies' major is an interdisciplinary program which allows a student to take courses in various academic departments. The American Studies approach, by stressing the inter-

relatedness of such elements in our civilization as the fine arts, architecture, history, technology, literature and popular culture cuts through the traditional academic lines of specialization so that a student can study American culture as a whole. The American Studies concentration prepares the student for graduate studies as well as for careers in teaching, museumology, government service and other areas where a broad knowledge of American civilization is required.

Organization and Administration

The program is administered by a committee consisting of the following members of the faculty:

Joseph Cox, Associate Dean	Elaine Hedges, English
Paul Douglas, English	Douglas Martin, History
Dean Esslinger, History	Fred Rivers, History
George Friedman, English	

The members of the American Studies committee will serve as advisors to students majoring in the program.

Major Requirements

1. Twenty four credits at the 300-400 level	
Introduction to American Studies (41.301) -----	3 credits
Seminar in American Studies (41.401) -----	3 credits
American literature courses -----	18 credits
or	
American history courses -----	18 credits
	24
2. Thirty credits at the 300-400 level	
American history courses (if 1c chosen) -----	6 credits
or	
American literature courses (if 1d chosen) -----	6 credits
Courses relating to American culture from other than	
the History or English Departments -----	12 credits
Courses in any of the Arts or Sciences -----	12 credits
	30
3. Six credits at the 300-400 level	
Non-American literature courses -----	6 credits
or	
Non-American history courses -----	6 credits
	6

41.301 INTRODUCTION TO AMERICAN STUD- IES (3) The first part of the course will be an examination of the aims and methods of American Studies. The second part will be a study of a specific topic or period in Ameri-	can civilization by examining literature, the fine arts, architecture, history, technology, and popular culture. Prerequisites: 6 hours of American history or 6 hours of American literature.
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BLACK STUDIES MAJOR

The Black Studies program is interdisciplinary concentrating mainly in courses offered in the English, History, Sociology and Political Science departments. The curriculum is subject to review and flexibility, as courses may be added or substituted when the need arises with the permission of the Advisory Committee and the Associate Dean.

Advisory Committee

Johnnella Butler, English	James Linder, Education
Thomas P. Knox, English	Richard Nzeadibe, History

A. The student must satisfy General Education Requirements which should include the following five courses:

American Literature	30.211	} recommended
	30.212	
U. S. History I and II	40.145	} required
	40.146	
Introduction to Sociology	80.101	

B. To declare the major, the student must be a sophomore or junior with a 2.0 C.P.A.

C. From the Arts and Sciences—Art, Biology, Chemistry, Economics, Geography, History, Modern Languages, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Sociology, Speech and Drama. Requirements in the Arts and Sciences are subject to review and change depending on each student's program. A viable program is available to students desirous of secondary certification.

15 hours

Survey of Black Literature I and II	30.251
	30.252
The History of Black America	40.381
The African World	40.133
	40.134

15 hours

3 hours from Group A	
6 hours from Group B	
6 hours from Group C	
"A" African Government and Politics	68.341
Africa in World Politics	68.435
The Geography of Africa	34.431
Sub-Saharan Africa	40.333
History of West Africa 1500-1885	40.334
History of Contemporary Africa	40.335
"B" The Literature of Black America	30.401
Minority Groups	80.381
Black-White Relations	80.470
Blacks in America: Myths and Realities	80.472
"C" Urban Economics	24.351
Urban Education	28.002

WOMEN'S STUDIES

The Women's Studies concentration within the General Studies major is an interdisciplinary program which offers students the opportunity to study the particular nature and role of women as individuals and as members of society. The concentration consists of eleven hours in a core curriculum of three interdisciplinary courses: —Women In Perspective, —Women In Art and Literature, and —Women In Society, plus twelve hours selected from department courses in Women's Studies. —Women In Perspective is strongly recommended as preparation for any upper division work in Women's Studies.

The Women's Studies concentration is administered by a committee of

faculty and students. The faculty members on the committee will serve as advisors to students majoring in the program:

Sara Coulter, English
Jo Ann Fuchs, Philosophy
Elaine Hedges, English
Eric Miller, Art
Donald Mulcahey, Evening
and Summer Division

Fred Rivers, History
Jane Sheets, Modern
Languages
John Toland, Sociology

33.231 WOMEN IN PERSPECTIVE (3) A survey of the past, present, and possible future place of women as individuals and as members of society with emphasis on the nineteenth and twentieth centuries in America.

00.000 WOMEN IN ART AND LITERATURE (4) Study of selected art and literature by women with emphasis on the nature of the contributions of women and the conditions

for creativity. Prerequisites: 6 hours in art and/or literature.

00.000 WOMEN IN SOCIETY (4) An examination of the distinctive role and contribution of women in society from the perspectives of several disciplines: history, philosophy, sociology, political science. Prerequisites: 6 hours in the social sciences.

*All courses are pending approval by the College Curriculum Committee. Please consult the current Schedule of Courses Booklet for approved courses.

Audiovisual Communications

Professor: LOGAN (Chairman)

Associate Professor: ROSECARNS

Assistant Professor: WEST

Instructor: BURTON, DIETZ, JONES

Assistant Instructor: BARNES

Audiovisual communications are becoming increasingly more important as modern education becomes more complex in keeping with the development and trends of society in areas such as urbanization, technology, and the accumulation of new knowledge. Under the pressure of a rapidly expanding population to be educated, more and more reliance will be placed upon the effective utilization of audiovisual communications.

Consequently, the audiovisual communications curriculum has been designed to meet the needs of different types of potential users . . . undergraduate students, especially prospective teachers, who have had limited contact and experience with this field, those seeking advanced degrees or who desire to know more about the rapidly developing field of instructional equipment, devices, and materials; and those who have the task of organizing practical audiovisual programs including audiovisual coordinators, administrators, directors of youth activities and religious education, government and industrial personnel, media specialists and librarians.

Though no undergraduate major is offered in audiovisual communications at the present time, courses are open as electives to all students of junior or senior standing except courses 13.369 which is required by all secondary education majors prior to their graduation. A master's degree is offered (see Graduate Studies Bulletin).

AUDIOVISUAL COMMUNICATIONS COURSES (AVCO)

Upper Division — Undergraduate Only

13.301 SURVEY OF INSTRUCTIONAL MEDIA

(3) Demonstrations and supervised experiences are provided to emphasize skills and techniques used to operate basic multi-sensory equipment and devices used in the classroom. Contributions, values, and principles of audiovisual communications are correlated with utilization of equipment and devices. Not open to students who have taken 13.415 Methods and Materials In New Education Media.

13.302 METHODS AND MATERIALS IN INSTRUCTIONAL MEDIA (3)

Stressed are the skills used in the preparation and production of selected types of sensory materials of instruction. Various methods and techniques

are also employed to demonstrate how these materials can be utilized effectively in instructional communications.

13.369 LABORATORY IN NEW EDUCATIONAL MEDIA (1 or 2)

Experience in operation of multisensory aids to teaching, preparation of teaching aids, and application of transparencies, tape and video recordings, slides, filmstrips, motion pictures and still pictures to the modern classroom.

a. Required of all Secondary Education majors during student teaching; course 315, or 301 may also be used to fulfill this requirement.

b. Not open to students who have completed AVCO 301 or 315.

Upper Division — Undergraduate and Graduate

13.401 HISTORY OF EDUCATIONAL TECHNOLOGY AND MATERIALS (3)

An examination of the development of education technology with particular emphasis on the influence of government, state departments of education, institutions of higher learning, industry, and professional organizations on the various instructional media. Identification of the contributions of media leaders. LAB FEE \$5.00.

13.415 METHODS AND MATERIALS IN NEW EDUCATIONAL MEDIA (3)

Methods of vital-

izing learning through the use of motion pictures, television, audio and video recording, field trips, transparencies, filmstrips, slides, and pictures; location of materials, operation of basic equipment and devices; preparation of basic tools of learning. LAB FEE \$5.00.

13.417 CLASSIFICATION AND CATALOGING OF AUDIOVISUAL MATERIALS (3)

Emphasis is placed on all types of classifying and cataloging non-print materials in accordance with the Dewey Decimal System. Other sys-

tems of classification and cataloging are surveyed. Rules for form of entry, factors determining choice and form of subject heading and descriptive cataloging are studied. This course is designed especially for librarians, media specialists, and teachers. Audio-visual equipment, devices, and materials are used to optimum advantage throughout. LAB FEE \$5.00.

13.431 INSTRUCTIONAL TELEVISION IN CLASSROOM EDUCATION (3) Designed to provide students with understandings of the history, status, and goals of television as it is used in education. Topics covered include television systems, programming sources, legal ramifications, sources of funds, special projects, comparative costs, sources of data, and current research as applicable to public and non-public school classrooms only. LAB FEE \$5.00.

13.433 INSTRUCTIONAL TELEVISION (3) This course is concerned with ITV systems and terminology, the ITV movement, elements of production, classroom utilization of the ITV product, developing the ITV workshop, careers in ITV, and aspects of administration, philosophy, evaluation, and research in ITV. Class projects and some utilization of television equipment play a role in the course. LAB FEE \$5.00.

13.441 COMPUTER TECHNOLOGY AND UTILIZATION (3) Exploratory course concerned with the rationale for, and the use of computers in various phases of education and related areas. The applications of computers are treated in areas such as instructional design (computer-assisted instruction), administrative and personnel services, and cost analysis. Techniques are examined for the organization, storage, processing and retrieval of data. Flow charting and keypunching experiences are included. (Course will not prepare students for positions as programmers). LAB FEE \$5.00.

13.453 INTRODUCTION TO AUDIOVISUAL PHOTOGRAPHY (3) Basic philosophy, scope, planning, and laboratory methods and techniques of preparing photographic audiovisual materials. Includes production of color and

black and white slides, prints, and filmstrips. LAB FEE \$10.00.

13.455 GRAPHIC COMMUNICATIONS (3) Language and design of graphics communications; principles from psychology and the visual arts; basic design principles; laboratory experiences such as layout, air brush techniques, "stat-king" utilizations, headliner and polaroid systems familiarization. LAB FEE \$10.00.

13.485 SEMINAR WORKSHOP IN EDUCATIONAL TECHNOLOGY (3) Special problems in educational technology are treated including the philosophy, scope, planning, and techniques of the preparation and production of selected types of photographic and related graphic materials. Computer-assisted instruction, random access and information and retrieval systems, simulators and trainers as well as significant developments in "hardware" and "software" are also stressed. Prerequisite: Three hours of audio-visual communications courses or departmental approval. LAB FEE \$5.00.

13.487 THEORY AND TECHNIQUES OF LINEAR PROGRAMMED INSTRUCTION. (3) Acquaints students with philosophy and principles of linear programming; analysis and evaluation of commercially prepared and instructor-made programs; instructional utilization; current research, developments, and trends. An opportunity is provided for the student to develop a linear program in his own area of concentration. Prerequisite: Teaching experience and department approval. LAB FEE \$5.00.

13.488 THEORY AND TECHNIQUES OF INTRINSIC PROGRAMMED INSTRUCTION (3) Principles and philosophy of intrinsic programming as related to the Crowderian techniques of programming; analysis of development; consideration of psychological learning principles involved; relation to and utilization in computer-assisted instruction. An opportunity is afforded the student to develop an intrinsic program in his area of interest. Prerequisite: Teaching experience and course in linear programming. LAB FEE \$5.00.

Graduate Division

13.501 ORGANIZATION, ADMINISTRATION AND SUPERVISION OF AUDIOVISUAL COMMUNICATIONS PROGRAMS (3) Organizational patterns, management procedures, and supervisory methods and techniques for audiovisual communications programs are considered. Major topics include: facilities; finance; selection, procurement, security and basic maintenance of equipment and materials; center operation; extension and in-service programs; assessments of systems and programs; and public relations. Prerequisite: Six hours of audiovisual communications courses and/or departmental approval. LAB FEE \$5.00.

13.557 SPECIAL PROJECTS IN THE PREPARATION OF AUDIOVISUAL MATERIALS (3) The theory, planning, and application of advanced methods and techniques in the preparation of audiovisual materials will be stressed. Student projects may involve aspects of photography, printing, holography, and related materials production. Field trips will also play an important role. Prerequisite: 13.453 or departmental approval. LAB FEE \$5.00.

13.563 APPLIED PSYCHOLOGY OF LEARNING (3) Includes Gagne's types of learning and recent psychological findings as applied to instructional communications in such areas

as: programmed instruction, sensory materials of learning, random access and information retrieval systems, and instructional television. LAB FEE \$5.00.

13.573 INSTRUCTIONAL AND FACILITY DESIGN (3) A systems approach to the integration of hardware, software, and personnel into a single unit with a schedule of time and sequential phasing to ensure orderly relationships and interaction of human, technical, and environmental resources to fulfill instructional goals. Included are the application of systems design to mediated self-instruction as part of individually prescribed instruction as well as systems design to large group or multi-media instruction. Student projects include both instructional and facility designs for academic or training utilization. Prerequisite: Six hours of audiovisual communications courses and/or departmental approval. LAB FEE \$5.00.

13.689 INTERNSHIP IN AUDIOVISUAL COMMUNICATIONS (3-6) Practical experience in audiovisual communications is provided. The intern will work cooperatively under the direction of an appropriate College faculty member and appropriate audiovisual field supervisor. He will engage in all aspects of

the school system program as related to audiovisual communications. In addition, he will become familiar, through visitation, with State and national audiovisual communications programs. Prerequisite: Six hours of audiovisual communications courses and departmental approval. LAB FEE \$5.00.

13.695 THEORY AND RESEARCH IN AUDIOVISUAL COMMUNICATIONS (3) Basic elements of communications theory are studied and applied to audiovisual communications. Relationships between the learning process and perception are reviewed in terms of communications. Selected communications systems are examined and research in audiovisual communications is analyzed and discussed. Prerequisite: Six hours of audiovisual communication courses or departmental approval. LAB FEE \$5.00.

13.699 MASTER'S THESIS IN AUDIOVISUAL COMMUNICATIONS (3) An original investigation, using an acceptable research method and design of a research problem, to be conducted under the direction of one or more faculty members. Credit granted only *after* thesis has been accepted by student's thesis committee.

Biological Sciences

Professors: CROOK, ERICKSON (*Chairman*), ODELL

Associate Professors: ANDERSON, KUNDIG, MORSINK, MUMA, WALKER

Assistant Professors: BUCHANAN, CASTELLI, DAIHL, EWIG, HENRIKSON, HILTON, LAUTERBACH, LEWIS, MECHLING, SCARBROUGH, SCHUETZ, SHOEMAKER, SMOES, WINDLER

Instructors: HOOE, JOHNSON, SCARSELLA, SCHURMAN

Students interested in biologically oriented careers in teaching, fundamental and industrial research, medicine, dentistry, pharmacy, veterinary science, oceanography, conservation and allied fields should major in this department. Staff members will aid each student in designing a program to meet his special needs.

Biology Major

The requirements for the major are: Biology 14.101, 14.105, 14.109, 14.331, 14.351, 14.401, and six credit hours from other courses offered by the department; Chemistry 22.101, 22.102, and 22.231; Physics 66.211 and 66.212; and Mathematics 50.115. At least 15 hours in Biology must be taken while in residence at Towson State College.

Biology 14.004, 14.113, 14.114, 14.301, 14.303 and 14.387 may not be included in the basic 30 hours required for the major without permission of the department chairman.

Honors Program: To graduate with honors in biology a student must complete Biology 14.486 and 14.498-14.499 to be taken in consecutive semesters of the senior year. The research thesis must be presented in an oral defense before the Honors Research Committee. An oral presentation open to the public is also required. In addition, a minimum of three credit hours must be selected from 14.491 and/or 14.481 in the junior year. For eligibility and general information consult the College Honors Program description.

Medical Technology

This program is listed under Health Science. Students should consult Dr. Carl Henrikson of the Biological Sciences Department, Director of Medical Technology, for further information.

Natural Science Major

The program is designed to give a broader view of the sciences than obtained in a traditional undergraduate major in a single science. This is done at the sacrifice of depth and students should, therefore, be aware that this major will not prepare them for graduate work in a single science. Course requirements are:

Biology 14.101, 14.105, 14.109, 14.291 or 14.491 (or Physical Science 64.401), Chemistry 22.101-102; one course of either 210, 211, 230, or 231, Physical Science 64.121, 64.211, Physics 66.211-212 (or 66.221-222) science electives (including one field course) for 11 credit hours, and Mathematics 50.115, for a total of 54 hours in science and mathematics.

Prospective secondary school teachers of general science should elect this major. To meet State Certification requirements a total of 36 hours of science are needed. Eighteen hours must be taken in either biology, chemistry, or physics, 6 hours in each of the other fields, and the remaining 6 hours from any of the above.

Graduate Program

The course of study leading to the Master of Science in Biology is designed to provide greater knowledge and understanding of biology and to help the student develop a proficiency in independent thought, inquiry and research. The student may pursue either the Thesis Program (30 credits and a thesis) or the Non-Thesis Program (36 credits). Detailed information regarding both programs is given in the Graduate Studies Bulletin.

BIOLOGY COURSES (BIOL)

NOTE: 14.101 is a prerequisite for all other biology courses. For details on exemption from this required course, see the Academic Regulations section of this bulletin.

Lower Division — Undergraduate

- 14.004 B.S.C.S. BIOLOGY METHODS IN THE SECONDARY SCHOOL (3) The course is designed to give the student an intensive study of the history, rationale and method of B.S.C.S. in the secondary school biology classroom. Special attention will be given to the laboratory as a teaching tool with students performing laboratories in the various versions. Evening and summer programs.
- 14.101 (103) CONTEMPORARY GENERAL BIOLOGY (4) The basic biological principles common to plants and animals. Topics include cell structure and processes (both physical and biochemical), mitosis, gametogenesis, aspects of embryology, genetics, evolution and ecology. Average of two laboratory hours per week. Each semester.
- 14.105 (204) GENERAL BOTANY (4) Morphology, anatomy, and physiology explored through the study of selected plant types. Average of three laboratory hours per week. Each semester.
- 14.109 (214) FUNCTIONAL ANATOMY OF VERTEBRATES (4) Organ systems of selected vertebrate types with emphasis on basic physiological processes. Average of two hours per week in laboratory work. Students who have taken 14.113-114 Human Anatomy and Physiology may not take this course. Each semester.
- 14.113-114 (209-210) HUMAN ANATOMY AND PHYSIOLOGY (4, 4) Skeletal, muscular, nervous, respiratory, circulatory, digestive, excretory, endocrine, and reproductive systems. Average of two laboratory hours per week. In order to receive credit, both semesters must be completed. Courses must be taken in sequence except with special permission of the instructor. Students who have completed 14.109, Functional Anatomy of Vertebrates, may not take this course without permission of the Department. 14.113 each semester, 14.114 each semester.
- 14.195 COURSE RESEARCH (1) Research related to a specific course successfully completed by the student. By invitation or with the consent of the instructor. Each semester.
- 14.207 (229) INTRODUCTION TO PALEONTOLOGY (4) Examination of major forms of life with the emphasis on appearances, diversification, and extinctions during the different geologic periods. Spring, odd years.
- 14.221 INTRODUCTION TO ANIMAL PARASITOLOGY (4) A survey of the major groups of animal parasites and their vectors. Emphasis will be placed on the more important human parasites. Prerequisite: 14.109 or consent of instructor. Spring, even years.
- 14.235 ECONOMIC BOTANY (2) A study of the plants and plant products which provide man with various luxuries and necessities. Emphasis will be on higher plants commercially important in North America. Prerequisite: 14.105 or consent of instructor. Fall, odd years.
- 14.253 (353) INVERTEBRATE ZOOLOGY (4) Aquatic and terrestrial species of phyla from the Protozoa through the Echinodermata with special emphasis on local forms. Insects are not considered. Economic, ecological, and taxonomic considerations. Average of two laboratory hours per week. Fall, each year.
- 14.291 (396) INTRODUCTION TO RESEARCH (2) Laboratory work of an advanced nature under the guidance of the department. Each student will present and defend his work at a seminar. Prerequisite: consent of instructor. Spring, each year.
- 14.295 COURSE RESEARCH (1) Research related to a specific course successfully completed by the student. By invitation or with the consent of the instructor. Each semester.

Upper Division — Undergraduate and Graduate

- 14.301 (401) FIELD NATURAL SCIENCE (4) A study of various environments to determine their physical and biological components and to understand the relationship of these forms to one another and to man. Emphasis is on field observation. An average of three laboratory hours per week. Once each year.

- 14.303 LIFE SCIENCE IN THE ELEMENTARY SCHOOL (3) Emphases placed on the conceptual approach to science teaching, the modes of scientific inquiry, and the utilization of living organisms in the classroom. Each semester.
- 14.304 (403) GENERAL ECOLOGY (4) Basic principles of ecology. Interrelationships between animals and plants and their natural environments, emphasizing the specific biomes available for study in Maryland. Studies will be based on observations and data collected in the field. An average of two laboratory hours per week. Spring, odd years.
- 14.310 (471) ENVIRONMENTAL CONSERVATION (4) Basic conservation practices and problems. Soil, water, forest, and wildlife resources with emphasis on interrelationships. Specialists in various phases of local, state, and federal conservation work conduct or assist in the conduct of numerous field trips. Average of two laboratory hours per week. Once each year.
- 14.315 MEDICAL MICROBIOLOGY (4) General microbiological techniques. Pathogenesis of bacterial, viral, rickettsial and fungal diseases with emphasis on medically important bacteria. Recommended for students pursuing a career in the medical sciences. Prerequisites: CHEM 22.101, 22.102. The latter may be taken concurrently. Spring, each year.
- 14.318 (407) MICROBIOLOGY (4) A course investigating the basic principles of such groups of organisms as bacteria, protozoa, and lower plant forms, with emphasis on bacteria. Average of three laboratory hours per week. Prerequisites: CHEM 22.101, 22.102. The latter may be taken concurrently. Fall, each year.
- 14.322 (421) MICROTECHNIQUE (3) Techniques used in preparation of plant and animal tissues for histological examination. Average of two laboratory hours per week. Prerequisites: CHEM 22.101, 22.102. Spring, even years.
- 14.331 (205) FIELD AND SYSTEMATIC BOTANY (4) Plant kingdom centered around taxonomy and ecology. Methods of collection, identification, and preservation will be developed in the field and laboratory. Average of three laboratory hours per week. Prerequisite: 14.105 or consent of instructor. Each semester.
- 14.341 PHYCOLOGY (4) The systematics, structure, ecology, physiology, and life histories of algae. Laboratory will include methods of collection, culture, and experimental study of selected species. Prerequisite: 14.105. Fall, even years.
- 14.345 (445) MYCOLOGY (4) An introductory study of the morphology, classification, life histories, and economic applications of the fungi. Average of three laboratory hours per week. Prerequisite: 14.105. Fall, even years.
- 14.351 (355) FIELD AND SYSTEMATIC VERTEBRATE ZOOLOGY (4) Evolution, distribution, and definitive features of each class are studied comparatively. Extensive field and laboratory work deals with morphologic, taxonomic, ecological, and behavioral features of selected vertebrate groups and species. Average of three laboratory hours per week. Each semester.
- 14.360 (422) HISTOLOGY (3) Tissues of the vertebrate body. Average of two laboratory hours per week. Prerequisite: 14.109. Spring, odd years.
- 14.367 GENERAL ENDOCRINOLOGY (3) Endocrine mechanisms regulating homeostasis and functional integrity of animals, with emphasis on vertebrates. Prerequisites: 14.109 or equivalent, CHEM 22.101, 22.102. Fall, even years.
- 14.371 (451) ANIMAL BEHAVIOR (4) The classification and evolutionary aspects of behavior with emphasis on behavioral mechanisms. An average of three laboratory hours per week. Spring, odd years.
- 14.381 (493) BIOLOGICAL LITERATURE (2) Familiarization with the literature of biology through the preparation of papers requiring a knowledge of techniques for exploring the literature. Two one-hour lectures per week. Prerequisite: at least 6 hours of biology. Fall, each year.
- 14.383 (391) HISTORY OF BIOLOGICAL CONCEPTS (3) Historical development of biological concepts through the reading of classical and contemporary writings. Fall, odd years.
- 14.385 (489) SELECTED GENERAL PRINCIPLES IN BIOLOGY (3) Current directions of biological investigations will be discussed together with a treatment of recent contributions to biological areas and principles. Sufficient background will be given to provide coherence and understanding. Three one-hour lectures. Prerequisite: consent of instructor. Evening and summer programs. Not for graduate credit, but for recertification.
- 14.387 BIOLOGY IN SOCIETY (3) Considerations given to the biological aspects of the environment; its concepts and problems and their effects upon the population. Once each year.
- 14.395 COURSE RESEARCH (1) Research related to a specific course successfully completed by the student. By invitation or with the consent of the instructor. Each semester.
- 14.401 (411) GENETICS (4) Heredity and variation, and their application to evolution and development. Gene action at the morphological, physiological and biochemical levels. Laboratory work entails use of *Drosophila*, corn, and *Neurospora* in the application of genetic principles. Average of three laboratory hours per week. Prerequisites: CHEM

- 22.101, 22.102 and MATH 50.115 or consent of instructor. Each semester.
- 14.403 (412) **ADVANCED GENETICS** (3) Emphasis on the molecular basis of gene action. Discussion of current work and methods related to the problem of gene structure, function, and mutation including the translation and regulation of genetic information. Prerequisite: 14.401 or its equivalent or consent of instructor. Spring, odd years.
- 14.404 **ECOLOGICAL TECHNIQUES** (3) A series of lectures and readings on standard investigative techniques employed by ecologists in the various specialty fields. An individual investigation, laboratory or field, using appropriate equipment, is required. Prerequisite: 14.304 or its course equivalent. Fall, even years.
- 14.408 (409) **CELL BIOLOGY** (4) A study of the molecular and morphological organization of the cell in relationship to functions of the cell's organelles. An average of three laboratory hours per week. Prerequisites: 14.105, 14.109, CHEM 22.231. Spring, even years.
- 14.411 (405) **WILDLIFE BIOLOGY** (4) Important wildlife species with emphasis on aspects of research and management. Specific techniques and problems are studied in the field. Average of two hours per week in laboratory and field work. Prerequisite: Permission of instructor. Fall, even years.
- 14.421 **IMMUNOLOGY** (4) Fundamental principles of immunology with emphasis on the nature of antibodies and antigens, blood groups, antibody — antigen reactions, hypersensitivity, autoimmunization tumor immunology, artificial grafting and the preparation of vaccines. Prerequisites: 14.315 or 14.318 or consent of instructor. Fall, odd years.
- 14.429 **BIOANALYSIS** (3) Microscopic and biochemical methods used in determining major components and important contaminants of feeds, spices, stabilizers, adhesives, bakery materials, fats and oils, meat products, crystal mixtures, dairy products, etc. An average of two hours per week in laboratory and field work. Prerequisite: 14.105, CHEM 22.101, 22.102, or permission of instructor. Evening and summer programs.
- 14.432 **VASCULAR PLANT TAXONOMY** (4) A study of the history and principles of vascular plant systematics with laboratory time devoted to collection and identification of plants in the local flora. Prerequisites: 14.105, 14.331 or consent of instructor. Fall, even years.
- 14.433 **PLANT SPECIATION** (3) A study of such speciation phenomena as race isolation, hybridity, polyploidy, pomixis, and self-compatibility as they influence the evolution of new populations. Prerequisite: 14.331. Spring, even years.
- 14.436 (437) **PLANT PHYSIOLOGY** (4) Life functions of plants as related to structure at all levels: cells, organs, and the complete organism. Consideration of the interaction of environmental and genetic factors on plant metabolism. Average of three laboratory hours per week. Prerequisites: 14.105, CHEM 22.101, 22.102. CHEM 22.231 recommended. Spring, odd years.
- 14.439 **PLANT ANATOMY** (4) Origin and development of organs and tissue systems in vascular plants. Average of three laboratory hours per week. Prerequisite: 14.105. Spring, even years.
- 14.441 **PLANT PATHOLOGY** (4) A study of plant diseases, their symptoms, causal agents, etiology, epidemiology, prevention, and control. Average of three laboratory hours per week. Prerequisite: 14.105. Fall, odd years.
- 14.456 (457) **ORNITHOLOGY** (4) Lecture, laboratory and field course in bird identification, structure, behavior, ecology, and general economic relationships. Emphasis is on birds of the Baltimore area. A banding station is operated in conjunction with the course. Occasional field trips. Average of two laboratory hours per week. Spring, even years.
- 14.458 (459) **MAMMALOLOGY** (4) The evolution, comparative morphology, systematics, and distribution of mammals. Representative life histories are considered. Average of two laboratory hours per week. Prerequisite: permission of instructor. Spring, odd years.
- 14.461 **ENTOMOLOGY** (4) Laboratory and field course in insects. Recognition of the more common orders, and a study of their structure, behavior, ecology, economic importance, and control. Average of three laboratory hours per week. Fall, even years.
- 14.463 **ANIMAL EMBRYOLOGY** (4) Developmental anatomy and the underlying principles involved in development. This last area will be approached from an experimental base. Average of three laboratory hours per week. Prerequisite: 14.109. Fall, odd years.
- 14.465 **ANIMAL PHYSIOLOGY** (4) Functioning of animal organ systems, with emphasis on the vertebrate body. Average of three laboratory hours per week. Prerequisites: 14.109, CHEM 22.101, 22.102. Fall, odd years.
- 14.481 (491) **DIRECTED READING IN BIOLOGY** (1-3) Independent reading in an area selected by the student in consultation with the instructor. Prerequisite: a minimum of 10 hours in biology. Each semester.
- 14.486 **SEMINAR: SPECIAL TOPICS IN BIOLOGY** (1-2) Study and discussion of topics in a specialized area to be selected by instructor. Areas will vary from semester to semester. Prerequisites: a minimum of 10 semester hours in biology or consent of instructor. Spring, each year.

14.491 (496) INDEPENDENT RESEARCH IN BIOLOGY (2-3) Independent investigation of a problem under the supervision of a staff member culminating in a written presentation. Prerequisite: a minimum of 15 semester hours in biology and consent of instructor. Each semester.

14.495 COURSE RESEARCH (1) Research related to a specific course successfully completed by the student. By invitation or with the consent of the instructor. Each semester.

14.498 (497) HONORS RESEARCH IN BIOLOGY

(2) Individual research of an extensive nature under the direction of a staff member, culminating in an honors thesis. Credit for 14.498 not awarded until 14.499 is successfully completed. Prerequisites: open only to advanced honors candidates and by consent of instructor. Each semester.

14.499 (498) SENIOR THESIS IN BIOLOGY (2) Writing of an honors thesis based on individual research done under the direction of a staff member. Prerequisites: open only to advanced honors candidates and by consent of instructor. Each semester.

Graduate Division

14.501 CURRENT TOPICS IN BIOLOGY (3) Discussion of current topics in a specific area of biology. The area will vary each semester; therefore, this course may be taken twice. Prerequisites: a suitable background in the area emphasized. Evening and summer programs.

14.505 PROBLEMS IN BIOLOGY (1-3) Laboratory or literature research on a particular problem of interest to the student that does not pertain to his thesis. Regular conferences with the instructor are required. A preliminary paper is submitted for discussion, suggestions and corrections. The final paper should incorporate the necessary changes. Credits to be arranged by consultation with the instructor. Evening and summer programs.

14.507 PHYSIOLOGICAL ANIMAL ECOLOGY (4) A study of the physiological responses of animals to varying ecological conditions. Prerequisites: 14.304, 14.465. Evening and summer programs.

14.509 AQUATIC BIOLOGY (4) A study of freshwater and brackish water plants and animals of the local area with a field emphasis. Several representative habitats are considered comparatively, using various methods of collecting and identifying species of the fauna and flora. Prerequisites: 14.331, 14.351, 14.253 or consent of instructor. Evening and summer programs.

14.533 PLANT MORPHOGENESIS (4) The morphological growth and development of plants in response to natural and artificial stimuli at the cellular, tissue, and organ level. Prerequisites: two botany courses. Evening and summer programs.

14.534 PLANT DISTRIBUTION (3) A study of the present distribution of the earth's major vegetational formations as related to environmental factors. Special emphasis is given to the terrestrial biomes of North America. Prerequisites: 14.331, 14.432 recommended. Evening and summer programs.

14.535 ENVIRONMENTAL PLANT PHYSIOLOGY (3) Physiological interactions between plants and environments at the organism level. Exchanges of physical and chemical factors such as energy, gases, water, pesti-

cides, air and water pollutants, fertilizers, lime, radioactive materials. Prerequisites: 14.436 or consent of instructor. Evening and summer programs.

14.553 BIOLOGY OF TERRESTRIAL AND FRESHWATER INVERTEBRATES (4) An advanced study of invertebrates including classification, physiology and various ecological parameters influencing distribution of local fauna in freshwater and terrestrial habitats. Parasites and insects are excluded. Prerequisites: 14.253 or consent of instructor. Evening and summer programs.

14.561 INSECT ECOLOGY (4) A study of insect communities and populations emphasizing conditions of the environment that favor abundance of insects in various habitats. Field work involves examination of various aquatic and terrestrial habitats. Prerequisites: 14.461, 14.253 recommended. Evening and summer programs.

14.601 GRADUATE RESEARCH (PLAN B) (3) An individual research project is carried out under the guidance of a graduate faculty advisor. Prerequisite: successful completion of all requirements for the Advancement to Candidacy Examination. Evening and summer programs.

14.608 INVESTIGATIONS IN CELL PHYSIOLOGY (3) Individual research on problems in cellular activity. Emphasis is directed toward the effect of various factors, including environmental agents, on cellular metabolism, membrane function, or enzyme activity. Prerequisites: 14.408, CHEM 22.351. Evening and summer programs.

14.631 EXPERIMENTAL PLANT ECOLOGY (3) The design and implementation of experimental procedures involving ecological plant relationships. Emphasis will be on the collection, interpretation, and presentation of data from laboratory and field experiments. The taxa to be investigated will be selected by the instructor and the student. Prerequisites: 14.304, 14.331, 14.405 or consent of the instructor.

14.697 GRADUATE SEMINAR (1) Student reports and discussion dealing with biological research. The subject matter will vary each semester. An outline of the sem-

inar and a bibliography are required. Students are required to enroll for two semesters. Evening and summer programs.

14.699 THESIS (6-9) An original investigation to be pursued under the direction of one or

more faculty members. Credit granted only after thesis has been accepted by the student's thesis committee. Evening and summer programs.

SCIENCE EDUCATION COURSES (SCIE)

The following courses are staffed by the Departments of Biological Sciences and Physics and are offered in cooperation with the Education Department. Descriptions of these courses are included under Education Department listings.

EDUC 26.341 (333) EARLY CHILDHOOD EDUCATION PROFESSIONAL BLOCK I—SCIENCE

EDUC 27.398 (390) STUDENT TEACHING IN THE SECONDARY SCHOOL—BIOLOGY

EDUC 27.398 (390) STUDENT TEACHING IN THE SECONDARY SCHOOL—SCIENCE

SCIE 76.002 FIELD COURSE IN SECONDARY TEACHING METHODS

SCIE 76.371 (335) TEACHING SCIENCE IN EARLY CHILDHOOD

SCIE 76.375 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL

SCIE 76.379 (383) TEACHING SCIENCE IN THE SECONDARY SCHOOL

SCIE 76.488 (SUMMERS) AEROSPACE EDUCATION WORKSHOP

SCIE 76.585 (509) SEMINAR IN ELEMENTARY SCHOOL SCIENCE

BIOL 14.303 LIFE SCIENCE FOR THE ELEMENTARY TEACHER

Business Administration

Chairman: HAMPTON

Professor: CHANDLER

Associate Professor: ROWE

Assistant Professors: CAMPBELL, CASTALDI, GIBNEY, SEGANISH

Instructors: BUCHOFF, HAIGHT, MACCHIETTE, NEVILLE

The Business Administration program seeks to develop personal and professional skills related to business and management. It provides training for careers in business or government as well as preparation for graduate study in business or management.

Requirements for the Major

Students majoring in business administration are required to take 39 credit hours in three categories: core courses; associated courses; upper-division business electives.

Core Courses

The student must complete the following 15 hours of courses with the grade of C or better: BUAD 16.101 Introduction to Business Management; BUAD 16.201 Accounting Principles I; BUAD 16.202 Accounting Principles II; BUAD 16.331 Financial Management; BUAD 16.341 Marketing.

Associated Courses

The student must complete the following 9 hours of courses with a grade of D or better: MATH 50.231 Basic Statistics (Math 50.331 and 50.332 may be substituted. ECON 24.301 and 24.302 may be substituted. For business psychology double majors, PSYC 70.111 may be substituted.) ECON 24.101 Economic Principles and Problems (Micro-economics); ECON 24.102 Economic Principles and Problems (Macro-economics).

Upper-division Business Electives

The student must complete 15 hours of business administration courses in addition to the core courses. The 15 hours must be chosen from upper division courses and must be completed with a grade of C or better.

Transfer Credit

Credit towards the business major will be given for approved courses taken at other schools. Students planning to transfer from junior or community colleges are encouraged to take an Introduction to Business course and six hours of accounting as part of their first two years of college. Six hours of economics may also be taken. Students are encouraged to take finance and marketing after transferring to Towson State College. Transfer students must complete, with a C or better, at least 21 hours of business administration credits at Towson State College in order to qualify for the business major.

Students currently enrolled at Towson State College may be given credit for courses taken at other accredited 4-year colleges. Approval should be gained in advance.

Requirements for the Minor

Students minoring in business administration must take 33 hours of courses including the core courses, associated courses, and 9 hours of upper-division business electives.

Areas of Concentration

Although not required, students are encouraged to select an area of concentration within the business administration major. Each area is designed by the student in conjunction with an advisor selected from the full-time faculty in the business administration department. The areas are designated so that students may gain depth and high levels of skills in specific functional areas.

The areas of concentration within the business administration major are:

Accounting — courses in areas such as basic, intermediate and advanced accounting, tax and cost accounting and auditing are available. This concentration is designed for students selecting careers in corporation accounting or planning to take the exam to be a certified public accountant.

Finance — courses in financial management, investment analysis, money and banking, economics. Designed for students seeking careers in banking or corporate finance.

Marketing — courses in market research, advertising, and transportation. Designed for students planning a selling, advertising, distribution or marketing career.

Personnel — courses in personnel, industrial relations, labor economics and management. Designed for students selecting a personnel or management career.

International Business — courses in international business, marketing and finance. Designed for students interested in learning the nature of international business and management.

General Business — courses selected from the overall program. Designed to develop a broad management background for students not seeking a specific functional area.

Additional electives recommended to business majors are: ECON. 24.309 Intermediate Price Theory; ECON. 24.323 Money and Banking; 24.327 International Economics; ECON. 24.381 Labor Economics; ECON. 24.407 Business Cycles and Forecasting; POSC. 68.207 State Government; POSC. 68.305 Urban Gov. & Politics; POSC. 68.375 Public Administration; PSYC. 70.104 Applied Psychology; MATH. 50.209 Math of Finance; MATH. 50.271, 272 Calculus; MATH. 50.337 Computer Programming; MCOM. 53.215 Bus. & Prof. Speech; MCOM. 53.256 Feature Writing; MCOM. 53.353 Publicity and Public Relations; and MCOM. 53.385 Mass Media in Modern Society.

BUSINESS ADMINISTRATION COURSES (BUAD)

Lower Division — Undergraduate

16.101 INTRODUCTION TO BUSINESS MANAGEMENT (3) This course is concerned with the problems of organization dynamics and behavior of people, within and outside the business, with which management must deal in attaining the objectives of the enterprise.

16.201-202 ACCOUNTING PRINCIPLES I, II (3,3) Fundamentals of accounting as applied to proprietorships, partnerships, and corporations. The recording process; construction, interpretation, and managements' use of financial statements.

Upper Division — Undergraduate

16.221 BASIC REAL ESTATE (3) Principles of Real Estate and Allied Fields. Maryland State Code of ethics, rights, transfer of property, financing transfer, and the real estate market. This course fulfills the credit requirement for the Real Estate Salesman's Licensing examination. (Not for major credit.)

16.225-226 REAL ESTATE I, II (3,3) I—Review of basic real estate, state laws and regulations, sales agreements, listing agreements, miscellaneous contracts, financing, mortgaging process, secondary markets; appraising fundamentals and ethics. Prerequisite: Permanent Salesman's License or 16.221

16.223 LIFE INSURANCE (3) Fundamental principles, contracts, cost to policy holders, premium holders, premium computation, calculation, apportionment of surplus. Laws and regulations, estate planning and group insurance. (Not for major credit.)

II—Review Real Estate I, state regulations, zoning, internal management, public relations, truth in lending law, national real estate aspects, tax aspects, data processing,

- real estate management. Prerequisite: 16.225.
- 16.301-302 INTERMEDIATE ACCOUNTING I, II (3, 3) Preparation and analysis of financial statements. Accounting theory. Valuation of working capital, noncurrent assets and liabilities, revenue and expenses. Prerequisite: 16.202
- 16.303-304 COST ACCOUNTING I, II (3, 3) First semester will offer components of manufacturing cost under the job order and processing cost system. The second semester will cover preparation of budgets and budgetary controls, standard costs and their application in budgetaries control. Prerequisite: 16.202
- 16.305-306 TAX ACCOUNTING I, II (3, 3) I—Federal income tax laws governing gross income, deductions, calculation of taxable income and income tax rates. Emphasis is placed on the effect of these laws on the income of individual tax payers. II—Federal income tax laws dealing with partnerships, corporations, special tax areas and State of Maryland income tax laws. Prerequisite: 16.202
- 16.325 BUSINESS LAW I (3) The function of the law with particular attention to contracts, agency, sales, commercial paper, personal property, and real property.
- 16.326 BUSINESS LAW II (3) The law of partnerships, corporations, estates, bankruptcy, and of government relationships with business. Prerequisite: 16.325
- 16.331 FINANCIAL MANAGEMENT (3) An analytical approach to the study of financial problems of business concerns. Instruments and institutions significant for financial management are studied. Prerequisites: 16.101, 16.202
- 16.332 ADVANCED CORPORATE FINANCE (3) This course covers selected topics in managerial finance including cost of capital, capital-structure management, techniques of financing, and tools of financial decision-making. Prerequisite: 16.331
- 16.333 PRINCIPLES OF INVESTMENTS AND SECURITY ANALYSIS (3) The valuation of stocks and bonds: safety, income, and marketability. Analysis of financial statements. Portfolio management. Prerequisites: 16.101, 16.202
- 16.341 MARKETING MANAGEMENT (3) An analytical approach to the study of marketing problems of business firms. Attention is focused on the influence of the marketplace, the industry structure, and the role of government. Prerequisite: 16.101
- 16.343 PHYSICAL DISTRIBUTION MANAGEMENT (3) A study of the elements involved in physical distribution management. Topics include transportation, packaging, materials handling, warehouse location. A systems approach is employed emphasizing the trade-offs between the various functions. Prerequisite: 16.341
- 16.345 ADVERTISING MANAGEMENT (3) Analysis of promotional strategies for different classifications of products and services. Planning, preparing and scheduling advertisements. Media selection and determination of effectiveness. Advertising research. Prerequisite: 16.341
- 16.346 INDUSTRIAL ADVERTISING (3) Functions of industrial advertising, research of the industrial market, management and agency relations, budgeting product promotion, media, advertising preparations. Prerequisite: 16.345
- 16.355 INTRODUCTION TO INTERNATIONAL BUSINESS (3) International payments, importing and exporting, foreign investment, market entry, foreign taxation, international business law. Prerequisite: 16.101
- 16.361 MANAGEMENT THEORY (3) The nature development and future prospects of management and organization theory. Management functions and processes are viewed in terms of organization, directing, communication, goals and responsibilities. Prerequisites: 16.101 or consent of instructor.
- 16.363 QUANTITATIVE METHODS FOR BUSINESS (3) A course examining the processes, tools, and techniques for quantitative analysis for management. Covers basic theory for solving deterministic and probabilistic models with emphasis on applications to the business environment. Includes linear programming, optimization models, inventory, queueing, scheduling and game theory. Prerequisites: 50.115 and 50.231.
- 16.371 PRINCIPLES OF TRANSPORTATION (3) Study of the economic and political factors affecting transportation and transportation systems. Development problems and government regulation. Study of freight and passenger carrier modes. Prerequisite: 16.101
- 16.381 PERSONNEL MANAGEMENT (3) Recruiting, selecting, utilizing, and maintaining an effective and satisfied work force. Prerequisite: 16.101
- 16.401-402 ADVANCED ACCOUNTING I, II (3, 3) I—The theory and practice of accounting for partnerships, installment sales, consignments, branch offices, and special accounting situations. II—A continuation of theory and practice of accounting as it pertains to consolidations, estates and trusts, municipal institutional accounting. Prerequisite: 16.302
- 16.403-404 AUDITING I, II (3, 3) I—Examination of generally accepted auditing standards, internal control, professional ethics, and an introduction to auditing procedures. II—A continuation of Auditing I concentrating on auditing procedures, techniques, and standards of reporting. Prerequisite: 16.302
- 16.435 INTERNATIONAL FINANCE (3) The operating framework of international finance in-

- cluding balance of payments, foreign exchange, foreign money markets and financial management of the multi-international corporation. Prerequisites: 16.331, 16.355
- 16.441 **MARKETING RESEARCH (3)** The theory and application of marketing research as a tool facilitating the corporate decision making process from sales research market analysis through motivational analysis, advertising policy and product and package design. Course projects will provide opportunity to develop proficiency in research design. Sampling theory, data collection, interview techniques and statistical analysis. Prerequisites: 16.341, 50.231
- 16.445 **INTERNATIONAL MARKETING (3)** The environment of international marketing including channels of distribution, advertising, and legal, economic and cultural factors. Problems and obstacles related to market surveys and development of policies. Regional studies. Prerequisites: 16.341, 16.355
- 16.461 **ADMINISTRATIVE ANALYSIS (3)** Techniques of increasing management efficiency, including organization analysis, systems analysis, time and motion study, automatic data processing and feasibility studies. Prerequisites: 16.101, 16.202
- 16.463-464 **CONTEMPORARY BUSINESS PROBLEMS I, II (3, 3)** A seminar course designed to challenge the student's ability to form soundly developed business decisions. The emphasis is on relating the appropriate marketing, financial and production information available to management. Prerequisite: nine hours upper level BUAD courses.
- 16.481 **INDUSTRIAL RELATIONS (3)** Studies in contract negotiation and collective bargaining. Labor disputes, internal problems in unions, management problems, and legal constraints. Prerequisites: 16.381, 24.381
- 16.482 **GRIEVANCES AND ARBITRATION (3)** Case study analysis of the Grievance and Arbitration procedure or a means of conflict resolution in existing Industrial Relations systems. Discharge, discipline, working conditions, past practice, promotion, overtime, and other specific arbitrable issues will be discussed. Prerequisite: 16.481.
- 16.497 **DIRECTED READINGS (3)** Readings in selected functional or conceptual areas of business or management. Prerequisite: Consent of instructor.
- 16.498 **INDEPENDENT RESEARCH IN BUSINESS ADMINISTRATION (3)** Directed research on specific problems in a functional area of business or management. Prerequisite: Consent of instructor.
- 16.499 **BUSINESS PRACTICUM (1, 2, 3)** Students are required to work in assigned projects in an actual business environment during mini-semester. Priority will be given to graduating seniors. Students must have completed at least 21 credit hours in Business Administration to participate in the mini-term.

Chemistry

Professor: KASK

Associate Professors: BLANKENSHIP (*Chairman*), MILIO, YARBROUGH

Assistant Professors: SWEETING, TOPPING

Chemistry Major

This major may be elected by students who intend to do graduate work in chemistry, to teach in secondary schools, to work in industrial, government and hospital laboratories, technical libraries, etc. Students who plan chemically oriented careers such as fundamental and industrial research, medicine, dentistry, pharmacy, veterinary medicine, agriculture, and other allied fields, may also elect this major. Students electing this major should select an advisor from the faculty of the chemistry department to assist them in designing a program to meet their special needs. Students should see their advisors early in their time at Towson State College and upon occasion of any change in courses or schedule in their program.

In addition to the general requirements for a bachelor's degree the following chemistry and supporting courses are required for all chemistry majors: Chemistry 22.101-102 (or 22.103-104), 22.211, 22.231-232, 22.341, 22.342, 22.343, 22.344, 22.411, 22.422; Physics 66.221-222 (or 66.211-212); Mathematics 50.273-274. Chemistry 22.241 is recommended for most students.

For those who intend to go to graduate school in chemistry at least two post-physical chemistry courses in chemistry and two semesters of German or Russian are strongly recommended. Additional physics and mathematics courses are also recommended, especially Computer Science 23.337 and/or 50.471.

Students in the secondary education program (planning to teach chemistry in accredited schools) have an additional certification requirement of Biology 14.101. These students should be registered with the Secondary Education department, should have an advisor in addition to their Chemistry Faculty Advisor on their education program, and should consult with him concerning current certification and program requirements.

A package of optional four-year suggested schedules is available by application to the chemistry department.

Natural Science Major

This major is designed to give a broader view of the sciences than is obtained in a traditional undergraduate major in a single science. This is done at the sacrifice of depth and students should, therefore, be aware that this major will not prepare them for graduate work in a single science.

Course requirements are Biology 14.101, 14.105, 14.109; Chemistry 22.101-102, and one of 22.210, 22.211, 22.230 or 22.231; Mathematics 50.115; Physical Sciences 64.121, 64.211; Physics 66.211-212 (or 66.221-222); Biology 14.291 or 14.491 or Physical Sciences 64.401; biological or physical sciences electives (including one field course) for eleven credit hours: a total of 54 or 55 hours in physical sciences, biological sciences and mathematics.

Prospective secondary school teachers of general science should elect this major. Students should plan their programs to meet the certification requirements of the area in which they plan to teach.

CHEMISTRY COURSES (CHEM)

Lower Division—Undergraduate

22.100 CHEMISTRY FOR NON-SCIENTISTS (3)

A course for the non-scientists to help him or her understand and evaluate current and future technological and scientific developments, especially those related to chemis-

try. Chemical principles will be discussed in the light of such topics as: nuclear power, environmental pollution and body chemistry. The approach will be non-mathematical. Three lecture hours and one discussion hour.

- 22.101-102 GENERAL CHEMISTRY (4, 4) Atomic and molecular structures and their relation to properties of matter; solutions; types of reaction, energetics, kinetics, equilibria, and the related study of some important metallic and non-metallic elements. Laboratory work involves individual quantitative experiments and semimicro qualitative analysis. Three lecture hours and one three-hour laboratory period. Prerequisite: High school algebra.
- 22.103-104 GENERAL CHEMISTRY FOR MAJORS (4, 4) For chemistry majors and other qualified students. Essentially the same as CHEM 22.101-102 but a more rigorous treatment of problems and a more extensive study of the elements. Three lecture hours and one three-hour laboratory period. Prerequisite: Entrance examination or a grade of at least C in college algebra-trigonometry or the equivalent.
- 22.210 PRINCIPLES AND METHODS OF CHEMICAL ANALYSIS (4) A one semester course in chemical analysis for non-chemistry majors emphasizing the theory and application of common gravimetric, volumetric, chromatographic, spectrophotometric, and electro-metric techniques. Prerequisite: 22.102, Two lecture, one recitation, and four laboratory hours.
- 22.211 QUANTITATIVE ANALYTICAL CHEMISTRY (4) Principles and methods of treatment

of data pertaining to chemical analysis followed by a development of the theory and techniques associated with common gravimetric, volumetric, and spectrophotometric methods of analysis. Two lecture hours and two three-hour laboratory periods.

- 22.230 ESSENTIALS OF ORGANIC CHEMISTRY (5) A one semester course in organic chemistry for non-chemistry majors taught on a conceptual basis. Emphasis will be on principles, mechanisms, and modern techniques. Laboratory will include synthesis and identification of organic compounds. Prerequisite: 22.102. Three lecture hours, one recitation and one three hour laboratory.
- 22.231-232 ORGANIC CHEMISTRY (5, 5) Structure, reactions, preparation and properties of the compounds of carbon, as well as mechanisms of organic reactions. Laboratory techniques, synthesis of typical organic compounds and modern methods of organic qualitative analysis. Three lecture hours and one four-hour laboratory period. Prerequisite: Chemistry 22.104 or 22.102.
- 22.241 PREPARATION FOR PHYSICAL CHEMISTRY (1) Practice in the strategy of solving physical and chemical type problems in preparation for use in physical chemistry. One lecture hour. Prerequisite: MATH 50.274 (or concurrently)

Upper Division—Undergraduate and Graduate

- 22.341 PHYSICAL CHEMISTRY — THERMODYNAMICS (3) Thermodynamics, phase relations, solution properties, chemical equilibrium and electrochemistry. Three lecture hours. Prerequisites: CHEM 22.102, MATH 50.274, and PHYS 66.222 or 66.212; CHEM 22.241 is recommended.
- 22.342 PHYSICAL CHEMISTRY — STRUCTURE AND KINETICS (3) Introduction to quantum chemistry; atomic and molecular structure, atomic and molecular spectroscopy, introduction to statistical thermodynamics, kinetic theory, chemical kinetics. Three lecture hours. Prerequisites: CHEM 22.102, MATH 50.274, and PHYS 66.222 or 66.212; CHEM 22.241 is recommended.
- 22.343 PHYSICAL CHEMISTRY LABORATORY I (1) Five short laboratory projects in physical chemistry. Prerequisites: CHEM 22.211 and CHEM 22.341 or 22.342.
- 22.344 PHYSICAL CHEMISTRY LABORATORY II (1) Five short laboratory projects in physical chemistry. Prerequisites: CHEM 22.211 and CHEM 22.341 or 22.342.
- 22.351 BIOCHEMISTRY (3) Introduction to the chemical structure and properties of the constituents of living matter, including amino acids, proteins, nucleic acids, enzymes, carbohydrates and lipids. Enzyme kinetics, equilibria and thermodynamics in biochemical transformations will be presented. Three

lecture hours. Prerequisites: CHEM 22.232 or 22.230.

- 22.352 BIOCHEMISTRY LABORATORY (2) To provide a basic working knowledge of a wide variety of laboratory techniques currently in use in the field. One recitation and one three-hour laboratory. Prerequisite: CHEM 22.351.
- 22.381 MODERN CONCEPTS OF CHEMISTRY (4) Principles of modern chemistry including some inorganic, organic, analytical, and physical chemistry in an integrated treatment. Primarily for secondary school science teachers. Three lecture hours and one three-hour laboratory period. May not be counted for credit by chemistry majors since the course content is covered elsewhere in their curriculum. Prerequisite: CHEM 22.102 or 22.104 and two other science courses.
- 22.382 STATISTICAL TREATMENT OF CHEMICAL DATA (3) Designed to develop skill in chemistry students and those in related fields in the application of simple statistical procedures and tables to laboratory data. One two-hour lecture and one three-hour laboratory period. Prerequisite: Sophomore standing or higher; high school algebra; an aptitude for logic and arithmetic is desirable. A course in quantitative analysis is recommended.
- 22.391 SPECIAL PROBLEMS IN CHEMISTRY (1-3) A laboratory or library problem in any

particular area of chemistry to be selected by the student in consultation with the instructor. Students are required to submit a written report. May be repeated for credit as CHEM 22.392, 22.393, etc. Prerequisite: Written consent of instructor. Offered each semester.

22.411 INSTRUMENTAL METHODS OF ANALYSIS (4) Theory, instrumentation, and application of various electrochemical, chromatographic, spectroscopic and spectrophotometric techniques to chemical analysis. Two lecture hours and one six-hour laboratory period. Prerequisite: CHEM 22.211, 22.341, and 22.342 or concurrently.

22.412 ADVANCED ANALYTICAL CHEMISTRY (3) A special topics course dealing with the theory and application of more recent and specialized techniques of chemical separation and analysis. Three lecture hours. Prerequisite: CHEM 22.411.

22.422 INORGANIC CHEMISTRY (4) Nuclear and extranuclear structure, molecular orbital and ligand field theories, aqueous and non-aqueous reactions, coordination chemistry, inorganic synthesis, modern instrumentation, etc. Three lecture hours and one three-hour laboratory period. Prerequisite: CHEM 22.342 or concurrently.

22.431 ADVANCED ORGANIC CHEMISTRY LABORATORY (2) Methods of organic synthesis. Emphasis on general types of organic reactions, relying, in part, on original literature sources. Includes considerable individual instruction in laboratory techniques and in the use of equipment and instruments. Two three-hour laboratory periods. Prerequisite: CHEM 22.232.

22.432 ADVANCED ORGANIC CHEMISTRY (3) Review of fundamentals. Advanced treatment of selected topics in organic chemistry. Typical subject matter areas: (1) reaction mechanisms; (2) structure elucidation; (3) stereochemistry; (4) linear free energy

relationships; (5) molecular orbital calculations. Three lecture hours. Prerequisite: CHEM 22.232, CHEM 22.342 or concurrently.

22.441 ADVANCED PHYSICAL CHEMISTRY (3) Two topics in the area of Physical Chemistry to be covered in depth. Topics will be selected by the instructor after consultation with the students. Examples of possible topics are: formal wave mechanics, bonding, solid state, liquid state, surface chemistry, colloids, high polymers, rheology, ionic conductivity, electrochemical cells, scattering phenomena, statistical thermodynamics. Three lecture hours. Prerequisites: CHEM 22.341 and 22.342.

22.452 ADVANCED BIOCHEMISTRY (3) Reactions and mechanisms involving the synthesis and metabolism of the constituents of living matter. A consideration of biological functions on the basis of fundamental principles of chemical thermodynamics and kinetics. Buffers, osmometry, chromatography and spectrophotometry are presented as applied to biochemical systems. Three lecture hours. Prerequisite: CHEM 22.351.

22.453 ADVANCED BIOCHEMISTRY LABORATORY (2) Basic laboratory techniques involving the synthesis, isolation, purification, identification, and further reactions of substances in biochemical systems. Two three-hour laboratory periods. Prerequisite: CHEM 22.351.

22.491 INTRODUCTION TO RESEARCH IN CHEMISTRY (1-3) An individual laboratory and/or library investigation in research interest of an instructor. May be repeated for credit as CHEM 22.492, 22.493, 22.494, etc. At the completion of a project the student is required to give a public seminar on the work done and the principles involved. The vote of the chemistry faculty present in the seminar will be considered by the research supervisor in assigning final grades. Prerequisite: Consent of instructor.

Communication Arts and Sciences

Professor: WALLACE (*Chairman*)

Associate Professors: LONEGAN, STONE

Assistant Professors: BOSLEY, DWIN, GLADSTONE, MACKERRON, ROWAN,
SCHWARTZ, VIRDEN

Instructors: KEANE, MORELL, SHIPMAN, STANLEY, TAYLOR

The Department of Communication Arts and Sciences is composed of two areas of concentration, i.e., General Speech-Mass Communications, and Speech Pathology and Audiology.

The Curricula in the Department are designed to provide the best possible learning and training in the communication arts and sciences. The programs of study are designed to provide, in cooperation with other departments, a broad liberal education as well as a special professional training with emphasis placed upon acquiring knowledge as well as skill. Students can select from five programs of study: (1) Speech and Drama major, Bachelor of Arts or Bachelor of Science; (2) Speech and Drama major, Secondary Education Program; (3) Public Address major; (4) Mass Communications major; or (5) Speech Pathology and Audiology major.

Students who wish to qualify for any of the five programs in communication arts and sciences must register with the area coordinator of their chosen major. Students who wish to major in speech pathology and audiology must also register with the Coordinator of the Speech Pathology and Audiology Program. Students majoring in speech and drama should register as soon as possible in their college careers, preferably early in their freshman year and certainly no later than the beginning of their sophomore year. Transfer students should register during their first semester at the College.

Transfer students are required to take twenty hours in residence in their major area.

No transfer credits will be accepted toward the major or minor in Programs (1), (2), (3) or (4) until satisfactory completion of a proficiency examination in specific course area. The student must make application for the credit transfer and examination through the area coordinator. A scheduled testing time will be arranged the beginning of each semester. Application for transfer credits and the exam is the responsibility of the student and application must be made one semester prior to examination.

Only those students maintaining a grade point of 2.75 in their major courses taken at Towson State College in Programs (1), (2), (3) or (4) will be recommended for a major in those programs of study.

Students pursuing a minor in Programs (1), (2), (3) or (4) must also maintain a grade point of 2.75 in order to be recommended for a minor at Towson State College.

Speech and Drama Major, Arts and Sciences Program

Thirty-six semester hours are required as follows:

Required of all majors: 21 semester hours plus 15 electives

1. 84.106, Voice and Diction; 84.203, Advanced Public Speaking; 84.131, Fundamentals of Speech Communication; 84.221, Oral Interpretation of Literature; 84.310, Phonetics of American English; 86.103, Introduction to the Theater; 86.211, Theatre Production.
2. Advanced courses selected from the following courses — 9 semester hours.
 - a. 53.212, Introduction to Film & Broadcasting; 53.261, Basic TV Techniques; 53.267, Film Communication; 84.216, Group Discussion; 84.231, Argumentation & Debate; 84.249, Forensics I; 84.250 Forensics II; 84.304, Persua-

sion; 84.320, Readers Theatre; 84.349, Forensics III; 84.350, Forensics IV; 84.395, Independent Study in Oral Interpretation; 84.403, Classical & Modern Rhetoric; 84.405, American Public Address; 84.423, Advanced Oral Interpretation; 84.432, Coaching & Management of Forensics; 84.495, Independent Study in Public Address.

Six semester hours to complete the major program chosen from the following groups:

- a. Three semester hours chosen from the following: 30.309, American Drama; 30.321, Modern Drama; 30.312, 30.313, World Drama; 30.319, English Medieval & Renaissance Drama; 30.320, English Drama from Restoration to Shaw; 30.415, 30.416, Shakespeare.
- b. Three semester hours chosen from the following: 84.213, General Semantics; 84.402, Speech Science; 84.421, Experimental Phonetics; 87.105, Speech & Language Development; 87.241, Introduction to Audiology; 87.302, Speech Pathology. The student who prepares to teach in the high school is also required to complete 84.379, Teaching Speech & Drama in the Secondary School.

In addition, the student is strongly urged to complete satisfactorily a minor program of advanced course work in an area closely allied to the field of speech and drama, but chosen from courses offered in a department other than Speech and Drama. The minor program should be chosen with the approval of the student's Speech Department adviser.

Speech and Drama Major, Secondary Education Program

The course of study for the teaching major follows the program of the general major but requires, in addition, 84.379, Teaching Speech and Drama in the Secondary School, a course in speech education for professional preparation. The prospective speech and drama teacher in the high school should also complete the required courses in secondary education in order to be certified for teaching. Speech Education majors should consult with adviser to determine minor area of certification. Student must complete 24 hours of Speech before taking 84.379. Student teaching should be done the first semester of the senior year.

Speech and Drama Minor

Requirements are the satisfactory completion of 24 semester hours of Speech and Drama courses including: 84.106, Voice and Diction; 84.131, Fundamentals of Speech Communication; 84.203, Advanced Public Speaking; 84.221, Oral Interpretation of Literature; 84.310, Phonetics of American English; 86.103, Introduction to the Theatre; 86.211, Theatre Production.

Public Address Major

This program is designed to allow the student to pursue, in depth, study in the area of rhetoric and public address; i.e., the theory and practice of speechmaking. This study includes the scientific nature of the speech process, theories of interpersonal communication, introduction to the speech arts of discussion, debate, oral interpretation of literature, persuasive speaking, and the history and criticism of public speaking. The program is designed for the student interested in college teaching, coaching, and research in speech communication. It also serves as excellent preparation for a career in business or government.

Requirements for a Public Address major: 36 semester hours are required as follows:

1. Required of all majors: (12 semester hours) 84.106, Voice and Diction; 84.131, Fundamentals of Speech Communication; 84.203, Advanced Public Speaking; 53.212, Introduction to Film and Broadcasting.
2. 18 semester hours of advanced courses chosen from three groups of courses.
 - a. Six semester hours chosen from the following: 84.216, Discussion; 84.231, Argumentation and Debate; 84.249, 84.250, 84.349, 84.350, Forensics; 84.432, Coaching and Management Forensics.
 - b. Six semester hours chosen from the following: 84.221, Oral Interpretation of Literature; 84.320, Readers Theatre; 53.261, Basic Television Techniques; 53.361, Advanced Television Techniques.
 - c. Six semester hours chosen from the following: 84.304, Persuasion; 84.402, Speech Science; 84.403, Classical and Modern Rhetoric; 84.405, American Public Address; 84.406, British Public Address; 84.495, Independent Study in Public Address; 53.385, Mass Media in Modern Society.
3. Six semester hours to complete the major program chosen from courses directed more specifically towards the student's vocational objectives with the advice and consent of the student's speech department's advisor.

Public Address Minor

Requirements are the satisfactory completion of 24 semester hours of speech courses including: 84.106, Voice and Diction; 84.131, Fundamentals of Speech Communication; 84.203, Advanced Public Speaking; 53.315, Business and Professional Speech; 84.221, Oral Interpretation of Literature.

Mass Communications Major

This program offers a broad understanding of the processes, functions and responsibilities of mass communications. Development of skills in fact finding, analysis and communication through the mass media is stressed. The program prepares the student for graduate work and offers excellent background for many careers such as law, public relations, business, communications media, sales and management. Flexibility is purposely built into the program so that the needs of students with special vocational objectives may be met.

Majors are advised to obtain a broad background in the fine arts, humanities, and social sciences.

Requirements for a Mass Communications major:

1. Required of all majors (18 semester hours): 53.151, Journalism in a Free Society; 53.212, Introduction to Film and Broadcasting; 53.315, Business and Professional Speech; 53.353, Publicity and Public Relations; 53.356, Feature Writing; 53.385, Mass Media in a Modern Society.
2. Electives (18 hours) chosen from the following. *3 credits selected* from the following courses: 53.261, Basic Television Techniques; 53.265, Basic Radio Production; and 53.267, Film Communication.

15 credits selected from the following courses: 53.001, Washington Film Seminar; 53.211 Communication Process; 53.214, Introduction to Advertising; 53.261, Basic Television Techniques; 53.265, Basic Radio Production; 53.267, Film Communication; 53.351, Public Opinion and the Press; 53.352, History of Journalism; 53.355, Newswriting; 53.361, Advanced Television Techniques; 53.363, History of Film to the Present; 53.364, Aesthetics of the Film; 53.367, Television Writing; 53.385, News Editing & Copyreading; 53.491, Independent Study in Film; 53.493, Independent Study in Radio; 53.495, Independent Study in Television; 53.496, Independent Study in Journalism; 53.497, Independent Study in Public Relations; 53.003, Broadcast Production Engineering; 53.002, Producing a Television Series; 84.216, Group Discussion; 84.221, Oral Interpretation of Literature; 84.231, Argumentation & Debate; and 84.304, Persuasion.

Mass Communications Minor

Requirements for a Mass Communications minor are the satisfactory completion of 24 semester hours chosen as follows.

Courses required for a minor (15 hours): 53.212, Introduction to Film & Broadcasting; 53.151, Journalism in a Free Society; 53.353, Publicity & Public Relations; 53.356, Feature Writing; and 53.385, Mass Media In Modern Society.

Electives (9 hours): 3 credits selected from the following courses: 53.261, Basic Television Techniques; 53.267, Film Communication, and 53.265 Basic Radio Production.

6 credits selected from the following: 53.001, Washington Film Seminar; 53.211, The Communication Process; 53.214, Introduction to Advertising; 53.252, History of Journalism; 53.261, Basic Television Techniques; 53.267, Film Communication; 53.351, Public Opinion and the Press; 53.358, News Editing and Copyreading; 53.361, Advanced Television Techniques; 53.364 Aesthetics of the Film; 53.496, Independent Study in Journalism; 53.497, Independent Study in Public Relations; 84.219, Parliamentary Procedure; 84.221, Oral Interpretation of Literature; 84.363, History of Film to the Present; 84.495, Independent Study in Public Address; and 84.216 Group Discussion.

Major in Speech Pathology and Audiology

Students who major in this area pursue a course of study which prepares them (a) to do clinical work in public schools, in colleges, in medical and paramedical institutions, (b) for graduate study, (c) for certification by the Maryland State Department of Education, (d) and partially meets certification requirements for A.S.H.A. Majors in this program participate in the College's American Speech and Hearing Association's Certified Speech and Hearing Clinic in public schools, and in other agencies and institutions. This program is supplemented by courses from the Department of Psychology and the Department of Education.

It is recommended that students interested in declaring a major in this area should do so as soon as possible and preferably no later than the end of the first semester of the sophomore year.

Curriculum in Speech Pathology and Audiology

The Department proposes the following curriculum for the undergraduate who wishes to major in speech pathology and audiology and meet certification requirements as a speech and hearing clinician in the public schools. The requirements for the major are:

1. Satisfactory completion with a grade-point average of 2.5 or better of 36 semester hours of speech pathology, audiology, related technical and scientific content courses, and clinical practice in speech.

General requirements are: 87.105, Speech and Language Development; 87.302, Speech Pathology I; 8.302,304, Speech Pathology II; 87.306 Speech Pathology III; 87.241, Introduction to Audiology; 87.305, Stuttering; Etiology and Therapy; 84.310, Phonetics of American English; 84.402, Speech Science; 87.487, Clinical Practice in Speech Correction; 87.488, Clinical Practice in the Public Schools. (Those wishing to pursue a program leading to a B.S. in Speech Pathology and Audiology without meeting state certification requirements, should take 84.213, General Semantics in place of 87.306, Speech Pathology III and must take 6 credit hours of 87.487 in place of 4 credit hours of 87.487 and 2 credit hours of 87.488).

The additional six semester hour requirements for the major should be elected from the following speech courses: 84.106, Voice and Diction; 84.213, General Semantics; 87.305, Stuttering Etiology and Therapy; 87.343, Clinical Audi-

ology; 87.401, Speech Reading and Auditory Rehabilitation; 87.489, Clinical Counseling in Audiology and Speech Pathology.

2. Satisfactory completion of 18 semester hours of selected courses in psychology and education. (Specific courses in these areas are to be determined by the Department in conjunction with the student.)
3. Satisfactory completion of 200 clock hours of supervised clinical practice in speech and hearing therapy.

MASS COMMUNICATION COURSES (MCOM)

Lower Division — Undergraduate

- 53.151 JOURNALISM IN A FREE SOCIETY (3) Examination of the role of journalism in the mass communication process and its significance in a free society. Prerequisite: English 30.102. (F, W)
- 53.211 COMMUNICATION PROCESS (3) Introduction to the communication process with emphasis on the functions of language and the problems of responsibility in communication. (F, even-numbered years)
- 53.212 INTRODUCTION TO FILM AND BROADCASTING (3) Survey of the contemporary film, television and radio media. (F, W)
- 53.214 INTRODUCTION TO ADVERTISING (3) Review of the contribution made by advertising to the United States economy, and of the principles and practices as applied to electronic and printed media. (F)
- 53.252 HISTORY OF JOURNALISM (3) Critical study of the development of the English language press; emphasis on the American press and its role in the political and economic progress of this country. (W)
- 53.261 BASIC TELEVISION TECHNIQUES (3) History of television practices in the United States and the study of writing production and performance in various areas of commercial and educational television. (F, W, S)
- 53.265 BASIC RADIO PRODUCTION (3) A course structured to introduce the student to the equipment and performance techniques necessary to produce a variety of radio show formats. The student will be required to participate on the campus radio station. Prerequisites: 53.212, 84.131. (F, W)
- 53.267 FILM COMMUNICATION (3) An introduction to the techniques and theories of film production through the use of 8-mm cameras, editors and sound equipment. Prerequisites: 53.212 and consent of instructor. (S)
- 53.315 BUSINESS AND PROFESSIONAL SPEECH (3) The student will participate in various types of speeches and study discussion, conference techniques, and parliamentary procedure. Prerequisites: Speech 84.131 or its equivalent. (F, W, S)

Upper Division — Undergraduate and Graduate

- 53.351 PUBLIC OPINION AND THE PRESS (3) Journalistic aspects of public opinion and propaganda; the impact of mass communications media on the formation of public opinion. Techniques of polling and testing public opinion.
- 53.353 PUBLICITY AND PUBLIC RELATIONS (3) Provides an awareness and understanding of public relations activities. Students learn publicity techniques and how to organize campaigns. (F, W, S)
- 53.355 NEWSWRITING (3) Introduction to news-writing from the standpoint of style, structure and readability. Prerequisites: 53.151, one English Composition course. (F)
- 53.356 FEATURE WRITING (3) Preparation of long and short articles, editorials and news features. Prerequisite: One English Composition course. (W)
- 53.358 NEWS EDITING AND COPYREADING (3) Practice in editing, headline writing, page make-up and use of pictures and type in newspapers, and editing copy for use on radio and television. Prerequisite: 53.355 or 53.356. (F, even-numbered years)
- 53.361 ADVANCED TELEVISION TECHNIQUES (3) Advanced techniques in television production and performance for commercial and educational television. Major emphasis on directing. Prerequisite: 53.261 or consent of instructor. (F, W)
- 53.363 HISTORY OF THE FILM TO THE PRESENT (3) Survey of the Motion Picture from its conception to the distribution of sound films. Prerequisite: 53.212. (F)
- 53.364 AESTHETICS OF THE FILM (3) Survey of film theory and aesthetics of silent, sound and avant-garde motion pictures. Prerequisite: 53.363 or consent of instructor. (S)
- 53.367 TELEVISION WRITING (3) Training and practice in writing commercials, documentaries and plays for the specific medium of television — commercial and educational. Prerequisites: Eng. 30.102, 30.204 and 53.261. (W)

53.385 MASS MEDIA IN MODERN SOCIETY (3) Seminar in mass media, concentrating on audience, content and effects of the media. Prerequisites: 53.151, 53.212. (W)

53.475 FILM WORKSHOP (3) Designed primarily to provide experienced or future teachers with background about film so that they may better help pupils to become informed about and to develop critical reactions to the films they view. Prerequisite: Consent of instructor. (First summer session)

53.485 NEWSPAPER WORKSHOP (3) Sponsored by the member newspapers of the Maryland-Delaware-D.C. Press Association, and Towson State College. Designed primarily to provide public school teachers with background about the mass media so that they may better help pupils to become informed and develop intelligent opinions on current affairs. Students will be expected to take one afternoon field trip. Class limit 100 (Graduate or Undergraduate credit). Prerequisite: Consent of instructor for undergraduates. Sect. 51 — Hours: 9:00 a.m.-1:00 p.m.

53.491 INDEPENDENT STUDY IN FILM (1-6) Independent work in film production and research. Production students may work independently, with campus production unit or with professional production company. Prerequisites: 53.212, 53.267. Consent of Instructor. (F, W, S and mini)

53.493 INDEPENDENT STUDY IN RADIO (1-6) Independent study in selected areas of radio

through directed readings, projects in conjunction with the operation of the student radio station or work with a full-time professional in the community. Selected students may work as laboratory assistants in the 53.265 Basic Radio Production class. Prerequisites: 53.265 and/or participation as a staff member on a campus or community radio. (F, W, S and mini)

53.495 INDEPENDENT STUDY IN TELEVISION (1-6) Independent study in selected areas of television production and research through selected readings, projects, papers and seminars. Prerequisites: 53.361, Consent of Instructor. (F, W, S & mini)

53.496 INDEPENDENT STUDY IN JOURNALISM (1-6) Independent study in the varied aspects of newspaper writing. Opportunity will be provided to work under the guidance of professional newspapermen connected with the Baltimore papers. Prerequisites: Consent of Instructor. (F, W, S, mini)

53.497 INDEPENDENT STUDY IN PUBLIC RELATIONS (1-6) Independent study in selected areas of public relations through directed readings, projects, papers or seminars. When possible opportunity will be provided for the student to work outside the classroom, under the cooperative guidance of his instructor and a full-time professional public relations person in the field of the Student's choice. Prerequisites: 53.353 and consent of Instructor. (F, W, S and mini)

GENERAL SPEECH COURSES (SPCH)

Lower Division — Undergraduate

84.106 VOICE AND DICTION (3) Analysis of articulatory and vocal usage as they relate to spoken language. Improvement of skills in voice, articulation, and pronunciation. (F, W)

84.131 FUNDAMENTALS OF SPEECH COMMUNICATION (3) Course is designed to assist the student in developing skills needed in interpersonal communication . . . effective listening and speaking, expressing social consciousness, ethical responsibility and self identification. (F, W, S)

84.203 ADVANCED PUBLIC SPEAKING (3) Principles of speech composition and organization. Study of manuscript, extemporaneous and impromptu speaking. Principles and application of speech analysis and criticism. Prerequisite: 84.101, or 84.131, or consent of instructor. (F, W)

84.213 GENERAL SEMANTICS (3) The effects of language and symbols upon individual adjustment and maladjustment. Semantic applications in audiology, education, speech pathology, and other arts and sciences.

84.216 GROUP DISCUSSION (3) Theory and methods of group discussion; practice in

forums, panels, and other forms of group communication. Prerequisite: 84.101 or 84.131. (F, W, S)

84.219 PARLIAMENTARY PROCEDURE (1) Brief analysis of history and philosophy of parliamentary law and study and practice of the procedure for conducting and participating in meetings. Fall — even numbered years.

84.221 ORAL INTERPRETATION OF LITERATURE (3) General principles of oral reading and the art of interpretation in poetry, drama, and the short story. Prerequisite: 84.101 or 84.131 and consent of instructor. (F)

84.231 ARGUMENTATION AND DEBATE (3) Essentials of argumentation; research, analysis, evidence, reasoning, case construction and refutation. Applications in public speaking and in college debate. Prerequisites: 84.101 or 84.131 or consent of instructor. (F)

84.249-84.250 FORENSICS I, II (1, 1) Practical work in debate, oratory, extemporaneous speaking, and other speech projects. Study of national debate questions, and opportunity to participate in forensic activities or a Speaker's Bureau. Prerequisite: Consent of Instructor. (F, W)

Upper Division — Undergraduate Only

- 84.349-84.350 FORENSICS (1, 1) Refer to 84.249, 84.250 for course description. Prerequisite: 84.249-250 and consent of instructor. (F, W)
- 84.371 PLAY PRODUCTION FOR THE CLASSROOM TEACHER (2)
- 84.375 SPEECH IN THE ELEMENTARY SCHOOL (3) A study of speech needs of the elementary school child and current methods and

materials used by the classroom teacher in meeting needs. (F, W)

- 84.379 TEACHING SPEECH AND DRAMA IN THE SECONDARY SCHOOL (2) Problems, materials, methods and techniques in specific speech instruction areas; integration of speech and drama in co-curricular school activities. Open only to students in the student block. (F, W)

Upper Division — Undergraduate and Graduate

- 84.304 PERSUASION (3) Rhetorical and psychological principles of influencing individuals and groups; application of persuasive principles in speaking performance; analysis of the use of persuasion in formal and informal communication. Prerequisite: 84.203 or consent of instructor. (F), odd numbered years.
- 84.310 PHONETICS OF AMERICAN ENGLISH (3) Analysis of speech sounds of American English and the use of phonetic symbols to record them. Emphasizes ear training, phonetic transcription, and language recordings. Prerequisite: 84.131 or 84.106 or 87.105 (F, W)
- 84.320 READERS THEATRE (3) Oral interpretation of selections from dramatic literature and individual and group reading. Includes principles of selecting, cutting, and programming in literature. Prerequisite: 84.221 and consent of instructor. (W)
- 84.395 INDEPENDENT STUDY IN ORAL INTERPRETATION (1-6) Independent study in selected areas of oral interpretation through directed readings, projects, papers or seminars. Prerequisite: 84.221, and consent of instructor. (F, W) (S, by request.)
- 84.402 SPEECH SCIENCE (3) Lectures, readings, and demonstrations presenting the structure and function of the physiological systems involved in respiration, phonation, resonance, and articulation. Fundamentals of the physiology of the speech mechanism and the physics of sound transmission. Prerequisite: 84.310.
- 84.403 CLASSICAL AND MODERN RHETORIC (3) Survey of rhetorical theory from Isocrates to contemporary communication theorists. Particular attention is given to Aristotle, Cicero and Quintillian. Designed to develop standards of rhetorical criticism. (W) — odd numbered years.
- 84.405 AMERICAN PUBLIC ADDRESS (3) History and criticism of two centuries of public address in the United States, the great

speakers, their historical environment, their beliefs and effects on American life. Prerequisite: 84.303 or 40.221 or consent of instructor. (F) — even numbered years.

- 84.406 BRITISH PUBLIC ADDRESS (3) Public address in Great Britain, the great speakers, their historical environment, their beliefs and effects on American life. Prerequisite: 84.303 or 40.121 or consent of instructor. (F) — odd numbered years.
- 84.421 EXPERIMENTAL PHONETICS (3) An advanced course in the study of Phonetic Science. Concerned with the application of experimental methods to study and research in voice and phonetics, especially spectrographic analysis. Includes critical review of research literature in Scientific Phonetics. Prerequisite: 84.310 or consent of instructor.
- 84.423 ADVANCED ORAL INTERPRETATION (3) Advanced theory and practice of oral interpretation with emphasis placed upon the relationship of the dramatic structure to the interpreter's performance. Prerequisites: 84.221 and consent of instructor. (W)
- 84.432 THE COACHING AND MANAGEMENT OF FORENSICS (3) 2nd semester of even-numbered years only. Problems of organizing, financing, and directing the forensic program in schools and colleges. Coaching, schedules, and techniques for debate and individual speech events. Competing philosophies of forensics and secondary school and college-level forensic organization are studied. (W) — even numbered years.
- 84.493 INDEPENDENT STUDY IN READERS THEATRE (1-6) Independent study in selected areas of Readers Theatre through directed readings, projects, papers or seminars. Prerequisite: 84.320 and consent of instructor. (F, W) (S, upon request.)
- 84.495 INDEPENDENT STUDY IN PUBLIC ADDRESS (1-6) Independent study in selected areas of public address through directed readings, projects, papers, or seminars. Prerequisite: consent of Instructor. (F, W, S)

SPEECH PATHOLOGY AND AUDIOLOGY COURSES (SPPA)

Service Division

- 87.091 (090) CORRECTIVE SPEECH (0) Speech correction and improvement for students who have defective speech. Students who regis-

ter for the course must pass it before they begin practice teaching.

Lower Division — Undergraduate

87.105 SPEECH AND LANGUAGE DEVELOPMENT (3) Analysis of normal speech and language development, including the phonetic, semantic, and syntactic elements. Physiology of speech and language learning. Observation will be required.

Upper Division — Undergraduate and Graduate

87.302 SPEECH PATHOLOGY I (3) Academic information and clinical methods for the problems of articulation and delayed language. Observation will be required. Prerequisite: 87.105, 84.310.

87.304 SPEECH PATHOLOGY II (3) Academic information and clinical methods for the problems of cleft palate and voice. Observation and participation will be required. Prerequisite: 87.105, 84.402.

87.305 STUTTERING — ETIOLOGY AND THERAPY (3) Analysis of etiologies, symptoms and therapeutic management of stuttering. Prerequisite: 87.302 or consent of instructor.

87.306 SPEECH PATHOLOGY III (3) Academic information and clinical methods for the problems of aphasia, mental retardation and cerebral palsy. Observation and participation will be required. Prerequisite: 84.402 or consent of instructor.

87.401 CLINICAL AUDIOLOGY (3) This course deals with: audiometric procedures for differential diagnosis of auditory disorders; functional loss; noise; air and bone conduction; masking; and principles of examination and interviewing techniques. Students will be required to observe and participate in audiologic workups. Prerequisite: 87.241 or consent of instructor.

87.404 PROFESSIONAL PROGRAM, PROBLEMS AND RELATIONSHIPS (3) Organization and administration of speech pathology and audiology programs in various professional settings; personal, professional and community relationships and responsibilities. Observation will be required. Prerequisite: 87.487 or consent of instructor.

87.407 SPEECH READING AND AUDITORY REHABILITATION (3) Theories, objectives and techniques for the teaching of speech reading, speech conservation and auditory training. Observations and practice will be required. Prerequisite: 87.241.

87.408 SPECIAL PROBLEMS SEMINAR—CLEFT PALATE (3) A multidisciplinary approach to all aspects of the patient with a cleft palate which would include lectures on etiology, embryology, speech patterns, otological and audiological considerations, dental and plastic reconstruction, speech therapy and follow-up. Prerequisites: 87.304 or consent of instructor.

87.409 SPEECH AND LANGUAGE FOR THE DEAF CHILD (3) Principles and techniques for developing speech and language in the

87.241 INTRODUCTION TO AUDIOLOGY (3) Anatomy, physiology and pathologies of the hearing mechanism, Symptoms and causes of hearing disorders. Pure tone air conduction testing and screening methods. Observation and practice will be required.

deaf child using whole-word and analytical methods; consideration of multiple handicaps; demonstration and observation will be required. Prerequisite: 87.105, 87.241, 87.407 or consent of instructor.

87.410 SPECIAL PROBLEMS PRACTICUM — CLEFT PALATE (3) Clinical practice in all aspects of the patient with a cleft palate. Prerequisites: 87.306 or professional experience and/or consent of instructor.

87.411 SEMINAR / WORKSHOP IN SPEECH PATHOLOGY AND AUDIOLOGY — SPEECH AND LANGUAGE DEVELOPMENT FOR THE SPEECH AND LANGUAGE DEPRIVED (6) Diagnostic, therapeutic and methods for the management of children who are deprived in the areas of speech and language. Prerequisite: 87.306, or professional experience and/or consent of instructor.

87.414 SPECIAL PROBLEMS SEMINAR (3) Concentrated investigation of particular problems in the field of speech pathology and audiology. The problems will vary each semester the course is offered. (Individuals having professional experience may receive credit through a proficiency examination.)

87.421 SEMINAR/WORKSHOP — HEARING IMPAIRED (6) Psychology and science of hearing and anatomy of the hearing mechanism will be reviewed. Investigation of communication, educational, vocational, psychological and social problems of the hearing impaired as these relate to personal adjustment in today's society. The study of the principles and techniques of teaching the hearing impaired.

87.451 AUDIOLOGICAL MANAGEMENT OF THE EXCEPTIONAL CHILD (3) Principles and techniques for identifying and evaluating hearing impaired children; consideration of multiple handicaps; demonstration and practice. Prerequisite: 87.401, or professional experience, or consent of instructor.

87.485 VOICE AND ARTICULATION SEMINAR (3) Investigation of nature and treatment of organic and functional voice and articulation disorders in children and adults, including vocal strain, nodules, carcinoma, management of the laryngectomized, and dysarthria. Prerequisites: 87.304 and 87.487.

87.487 CLINICAL PRACTICE IN SPEECH CORRECTION (1-3) Clinical observation of and practice in therapeutic procedures with various types of speech, language and/or hearing disorders in the Towson State College

Speech and Hearing Clinic. Students may also be assigned a practicum in the Lida Lee Tall School and/or various centers that offer speech, language or hearing therapy, such as hospitals or private agencies. (Credit is for 2 semester hours per semester, except summer.) Prerequisite: 87.302 or consent of instructor.

87.488 CLINICAL PRACTICE IN PUBLIC SCHOOL (6-9) Students assigned to an approved therapy program for observation and practice teaching. The student will earn a minimum of 100 of the 200 clinical clock hours required for certification. Prerequisite: 3 credits of 87.487.

87.489 CLINICAL COUNSELING IN AUDIOLOGY AND SPEECH PATHOLOGY (3) Systems of directive and nondirective counseling utilized by speech and hearing clinicians for the management of organic and nonorganic disorders. Techniques of interviewing, case history recording, and the conditioning of

semantic reactions through interpersonal interaction. Prerequisites: 87.241 and 87.304.

87.496 INDEPENDENT STUDY IN SPEECH PATHOLOGY AND AUDIOLOGY (1-4) Independent study in selected areas of Speech Pathology and Audiology through projects, papers and seminars. A portion of the course may involve assisting in laboratory experiences in connection with Speech Pathology and Audiology course(s). Prerequisites: Invitation of Department only and upper division standing.

87.497 DIRECTED READINGS IN SPEECH PATHOLOGY AND AUDIOLOGY (1-4) Directed readings in selected areas of Speech Pathology and Audiology in order to provide for the individual a comprehensive coverage of a special area within the broader range of communication disorders or to meet special needs of students. Prerequisites: Upper division standing and by invitation of the department.

Graduate Division

87.501 LANGUAGE DISORDERS OF CHILDREN (3) Investigation of mental retardation, emotional disturbance and hearing loss in children in terms of speech and language disorders. Prerequisite: 87.105 and 87.302.

87.505 NEUROPATHOLOGIES OF SPEECH (3) Etiology, nature and management of cerebral palsy and minimal brain damage in children, and dysphasia in adults. Prerequisite: 87.306 and 87.487.

87.507 DIAGNOSTIC METHODS IN SPEECH PATHOLOGY (3) Standardized and non-standardized techniques for testing the speech, language and general intellectual functioning of children and adults. Practicum experience in speech evaluations and report writing. Prerequisite: 87.485 and 87.505.

87.511 APPLICATION OF LINGUISTICS TO SPEECH PATHOLOGY (3) Investigation of traditional and contemporary research in the area of psycholinguistics and generative grammar. Application of this to diagnosis and management of those with language disorders. Prerequisites: Graduate Standing.

87.513 INTRODUCTION TO RESEARCH IN SPEECH PATHOLOGY AND AUDIOLOGY (1) Discussion of research methods, techniques and needs in speech pathology and audiology. Reading and understanding professional

journal articles. Prerequisite: consent of instructor.

87.585 SEMINAR IN MAXILLOFACIAL DISORDERS (3) Emphasis on the etiology, nature and team-management of the individual with cleft palate/lip. Discussion of other maxillofacial deformities resulting in defective speech. Prerequisite: 87.304 and 87.487.

87.645 ADVANCED CLINICAL PRACTICE (2) Experience in the College Clinic as well as externship in public schools, hospital clinics and rehabilitation settings with the speech defective. Introduction to the supervision of undergraduate trainees. Prerequisites: 87.487 and/or professional experience.

87.695 GRADUATE RESEARCH PAPER IN SPEECH PATHOLOGY AND AUDIOLOGY (3) Preparation of extensive paper dealing with a current area of research in the field or with the results of a clinical experiment. Prerequisite: Consent of graduate committee.

87.696 INDEPENDENT STUDY IN SPEECH PATHOLOGY AND AUDIOLOGY (3) Preparation of extensive paper dealing with professional clinical experiences. Discussions of techniques, innovations, methods employed and recommendations for improvements. Prerequisite: Professional experience.

Economics and Political Sciences

Professors: BELGRAD, COLEMAN, EHRLICH, GROSSMAN (*Chairman*), MERANI, SANBORN

Associate Professors: EKPO, PAUL, SHIN

Assistant Professors: GERMAN, KUMAR, WEINTRAUB

Instructor: DENT

Lecturer: LEE

The program of courses in political science and economics aims to promote understanding of the nature of political relationships and the workings of economic systems. The majors in political science and economics are designed to provide preparation for advanced study and to provide the foundation for careers in public administration, law, public relations, business, and research.

Economics Major

Thirty credit hours are required for the major in economics, including 24.101, 24.102, 24.301, 24.302, 24.309, 24.323, and 24.335.

Economics Minor

Twenty-four hours are required for the minor in economics, including 24.101, 24.102, and 24.323.

Six hours can be taken in the following courses to satisfy the requirements for a major or minor in economics: Geography 34.231 Economic Geography; History 40.417, 418 Economic History of Europe; and History 40.365, 366 Economic History of the United States.

Political Science Major

Thirty credit hours are required for the major in political science, including six hours from among 68.101, 68.103, 68.107, or 68.137, and three hours from among 68.455, 68.456, 68.481, 68.487, or 68.491. Twenty-one hours must be taken at the upper division.

Twenty-four hours are required for the minor in political science, including six hours from among 68.101, 68.103, 68.107, or 68.137, and fifteen hours of upper division courses.

Six hours can be taken in the following courses in other disciplines to satisfy the requirements for a major or a minor in political science: Economics 24.101-102, Principles and Problems; Economics 24.311, Government and Economic Life; Economics 24.327, International Economics; Geography 34.381, Political Geography; Economics 24.381, Labor Economics and Labor Relations; Economics 24.337, Public Finance; History 40.370, Diplomatic History of the United States; and History 40.367, 368, Constitutional History of the United States.

Normally a student who transfers to Towson State College with senior standing will be expected to complete fifteen hours of upper division political science courses here to satisfy the requirements for a major; those who transfer below senior standing normally will be expected to complete twenty-one hours of upper division political courses.

ECONOMICS COURSES (ECON)

Lower Division —Undergraduate

24.101 ECONOMIC PRINCIPLES AND PROBLEMS I (3) How private enterprise determines what is produced, prices, wages, profits. Supply and demand. Competition and monopoly. Labor unions, income distribution.

Farm policy. The role of the government in our economy.

24.102 ECONOMIC PRINCIPLES AND PROBLEMS II (3) Inflation and unemployment—causes and remedies. Money and banking.

Government spending and taxation. International trade. Prerequisite: 24.101

- 24.201 ECONOMICS OF HEALTH (3) Study of the current structure of the delivery of health

services and methods of financing health expenditures. Current issues in the economics of health. Prerequisite 24.102 or 24.101 and consent of instructor.

Upper Division — Undergraduate Only

- 24.301 FUNDAMENTAL STATISTICS FOR ECONOMICS I (3) Analysis and presentation of business and economic data; frequency distribution; measures of central tendency and variability; sampling and estimation of parameters; testing of hypotheses; simple regression analysis; measuring changes in price. Prerequisites: Mathematics 50.115 or equivalent. (Not open to freshmen)

- 24.302 FUNDAMENTAL STATISTICS FOR ECONOMICS II (3) Bayesian decision theory; probability models and decision making; analysis of variance; measuring and forecasting economic change with time series; forecasting and decisions by partial and multiple regression models; stochastic functions; statistical quality control. Prerequisites: 24.301 or Mathematics 50.231 or equivalent. (not open to freshmen)

- 24.309 INTERMEDIATE PRICE THEORY (3) Determination of prices, output, wages, resource allocation. Theory of the firm. Theory of competition, monopolistic competition, oligopoly, and monopoly. Prerequisite: 24.102.

- 24.311 GOVERNMENT AND ECONOMIC LIFE (3) The rationale of government control and regulation of private enterprise. Maintenance of competition, antitrust policy. Public utility regulation. Prerequisite: 24.102.

- 24.315 ECONOMIC DEVELOPMENT (3) Theory of economic growth. Problems and programs relating to underdeveloped countries. Prerequisite: 24.102.

- 24.323 MONEY AND BANKING (3) Organization and function of the money, credit and banking system of the United States; banking institutions, Federal Reserve System; the relation of money and credit to prices; foreign exchange. Prerequisite: 24.102.

- 24.327 INTERNATIONAL ECONOMICS (3) International trade theory; balance of payments, problems, and adjustment mecha-

nism; foreign exchange; foreign trade policy; theory of tariffs and other trade restrictions; international monetary system and organization; trade and economic growth. Prerequisite: 24.102.

- 24.331 COMPARATIVE ECONOMIC SYSTEMS (3) Contemporary economic systems with emphasis on methods of social control. Capitalism, socialism, communism. Economic planning. Prerequisite: 24.102.

- 24.335 MACROECONOMIC THEORY (3) The overall level of output, prices, employment, interest rates. Keynesian economics. Prerequisite: 24.102.

- 24.337 PUBLIC FINANCE (3) Principles of taxation, government expenditure and public debt; relationship of fiscal policy to income and growth. Prerequisite: 24.102.

- 24.351 URBAN ECONOMICS (3) Economic bases for the existence of metropolitan areas. The economy of the metropolitan area; its growth, income distribution, economic stability. Transportation and land use patterns. Social and other problems of metropolitan areas. Application of elementary price theory to the analysis and solution of urban issues and problems. Prerequisite: 24.102.

- 24.381 LABOR ECONOMICS AND LABOR RELATIONS (3) The determination of wages. Labor unions: history, structure, activities, effects. Government labor policy. Prerequisite: 24.102.

- 24.401 HISTORY OF ECONOMIC THOUGHT (3) Development of economic theory; eighteenth and nineteenth century classical schools. Modern economic literature on price, investment, and employment. Prerequisite: 24.102.

- 24.407 BUSINESS CYCLES AND FORECASTING (3) Business cycles theory; measuring economic activities; policy proposals for controlling economic fluctuations. Prerequisite: 24.323 or 24.335.

Upper Division—Undergraduate and Graduate

- 24.481 INDEPENDENT STUDY (1-3) Individual and supervised study in selected areas of economics. Admission by consent of instructor.

- 24.485 PROSEMINAR ON ECONOMIC ISSUES (3) Research and writing of papers on an economic issue selected by the instructor.

Prerequisites: 24.309, 24.323, and 24.335.

- 24.489 WORKSHOP ON ECONOMIC EDUCATION (3) Designed to help teachers and school administrators gain a better understanding of the economic workings of the society in which we live. Prerequisite: consent of the instructor.

POLITICAL SCIENCE (POSC)

Each 100 level course—101, 103, 107, 137—is at the introductory level. Each may be taken without prerequisites. Each fulfills the general education requirement.

Lower Division — Undergraduate

- 68.101 INTRODUCTION TO POLITICAL SCIENCE (3) The origins of modern governments. The nature of constitutions and constitutionalism. A definition and interpretation of politics. Prerequisite: sophomore standing.
- 68.103 INTRODUCTION TO AMERICAN NATIONAL GOVERNMENT (3) Structure and functions of the government of the United States and the problems involved in the extension of the scope of democratic government in our contemporary life.
- 68.107 INTRODUCTION TO INTERNATIONAL RELATIONS (3) An introductory examination of principles of legal, political, and social relations among nations.
- 68.137 INTRODUCTION TO COMPARATIVE POLITICS (3) The study of politics is introduced through an examination of different political systems. The activities of parties, movements, and pressure groups are examined in the context of different social, political, and economic frameworks.
- 68.207 STATE GOVERNMENT (3) Historical background, state constitutions, and the legislative and judicial branches of government. Problems of state administration and federal-state relations. Prerequisite: 68.103, or consent of the instructor.

Upper Division — Undergraduate and Graduate

Students may be admitted to upper division courses without the listed prerequisites after obtaining the consent of the instructor.

- 68.303 THEORY OF INTERNATIONAL POLITICS (3) The theories of mutual relations of states. Elements of national power; international politics as a struggle for power. Restraints upon the struggle for power. Prerequisite: History 40.264 or 68.107.
- 68.305 URBAN GOVERNMENT AND POLITICS (3) The political system of the American urban area. The formal structures of the governments in the metropolis are analyzed in the context of the evolution of relations between citizens and leaders. Prerequisite: 68.103.
- 68.307 CONTEMPORARY INTERNATIONAL POLITICS (3) An examination of the conduct of international relations by the Western, the Communist, and the non-aligned blocs in the Post-World War period. Prerequisite: 68.303.
- 68.337 COMPARATIVE GOVERNMENT OF FOREIGN POWERS: THE WESTERN WORLD (3) Constitutional and legal processes of England, France, Italy, and Germany. Some attention given to the small social-democratic states of Europe. Prerequisite: 68.137.
- 68.338 COMPARATIVE GOVERNMENT OF FOREIGN POWERS: RUSSIA AND THE EAST (3) Constitutional and legal processes of Russia, Japan, China and other Eastern powers. Prerequisite: 68.137.
- 68.339 COMPARATIVE POLITICAL SYSTEMS (3) The course will attempt to bring together the analytical concepts and methodology techniques that may be applied to the study of political systems in a comparative sense. Prerequisite: 68.101 or 68.137.
- 68.341 AFRICAN GOVERNMENT AND POLITICS (3) The politics and governments of the nations of the African continent.
- 68.351 THE GOVERNMENT AND POLITICS OF LATIN AMERICA (3) Presents both the formal governmental structure of Latin American nations and the basic factors which influence their political life. Prerequisites: History 40.121 and 122.
- 68.355 THE LATIN AMERICAN POLICY OF THE UNITED STATES (3) Diplomatic and cultural relations between the United States and Latin America. The Pan-American Movement, Implementation of the Monroe Doctrine, and the Advent of the Good Neighbor Policy. Prerequisites: History 40.145, 146.
- 68.361 POLITICAL BEHAVIOR (3) An introduction to the substantive theory and methodology of behavioral analysis. Topics include voting behavior, elite behavior, an analysis of types of political conflict, and personality and politics.
- 68.375 PUBLIC ADMINISTRATION (3) Administration as a central element of contemporary society, with special reference to the problems of government organization, control, personnel, finance, and public relations. Prerequisite: 68.103.
- 68.381 THE PRESIDENCY (3) A discussion of the origin of the office, the selection of the president and policy-making in the executive branch. Prerequisite: 68.103.
- 68.383 CONGRESS (3) An investigation of the relations of Congress with the other branches of government and with the political parties and interest groups. The course also examines the relationships between a member of Congress and his constituency as well as the internal dynamics of Congress. Prerequisite: 68.103.

- 68.401 INTRODUCTION TO LAW (3) The legal processes in the United States. This course is designed primarily for the liberal arts student. Prerequisite: sophomore standing and 68.103.
- 68.417 AMERICAN POLITICAL PARTIES (3) Origin and development of the American two-party system. The activities of pressure groups and organizations, and their effects upon the party system. Prerequisite: 68.103 or History 40.145, 146.
- 68.418 CONSTITUTIONAL LAW (3) A study of the constitution of the United States based on leading judicial decisions interpreting the constitution and statutes from 1789 to the present. Prerequisite: 68.103.
- 68.427 POLITICAL THEORY I (3) Political thought in the West from the Greeks to the end of the sixteenth century. Prerequisite: History 40.263, 264 or consent of instructor.
- 68.428 POLITICAL THEORY II (3) Political philosophers and their writings since the sixteenth century. Attention given to the conflict of ideologies in the twentieth century. Prerequisite: History 40.263, 264 or consent of instructor.
- 68.430 POLITICAL IDEAS OF SOCIALISM AND COMMUNISM (3) This course deals with selected topics in the political theory of socialism and communism including socialism and the ancient regimes, socialism and political organization, Russian, Leninist and Stalinist theory, and socialist ideas in the post cold war period. Prerequisite: 68.428.
- 68.432 UNITED STATES-SOVIET RELATIONS (3) Diplomatic, cultural, and economic relations between the U.S.S.R. and the U.S. Emphasis on the period since 1933 with a careful study of the effects of the Second World War upon the balance of power. Prerequisite: History 40.263, 264, 145, 146, or consent of instructor.
- 68.435 AFRICA IN WORLD POLITICS (3) The role of African nations in the nuclear age, and their efforts to achieve unity. Prerequisite: History 40.264 or consent of instructor.
- 68.439 UNITED STATES FOREIGN POLICY IN SOUTHEAST ASIA (3) American foreign policy in Southeast Asia in the Post World War II period. Prerequisites: 68.303, and History 40.110, 146, or consent of instructor.
- 68.441 CONTEMPORARY UNITED STATES-WESTERN EUROPEAN RELATIONS (3) Emphasis will be on NATO, the European Economic Community, and the Anglo-American efforts to create an Atlantic partnership between Europe and the United States. Prerequisite: History 40.264 and 40.146, or consent of instructor.
- 68.445 UNITED STATES FOREIGN POLICY IN SOUTH ASIA (3) A discussion of American foreign policy in South Asia mainly since 1945. Emphasis will be on India and Pakistan. Prerequisite: 68.303, History 40.109, 146, or consent of instructor.
- 68.450 GROUP POLITICS AND PUBLIC OPINION (3) The role of pressure groups and public opinion in the American political system. Prerequisite: Junior standing and nine hours of political science, or consent of instructor.
- 68.455-456 INTERNATIONAL LAW AND ORGANIZATION I, II (3, 3) An examination of the theories and the development of international law up to the present. The character of the modern state system, the role of International organizations, and international law and resort to force. Prerequisites: 68.303, and History 40.264, or consent of instructor.
- 68.461 RESEARCH METHODS IN POLITICAL BEHAVIOR (3) The major emphasis of this course will be on the use of quantitative techniques in political research. Topics include the preparation of a research design, statistical analysis, and the methods used in the conduct of political inquiry. Prerequisite: Any course at 100 level.
- 68.465 EDITORIAL WORK—TOWSON STATE JOURNAL OF INTERNATIONAL AFFAIRS (1) Members of the Editorial Board of The Towson State College Journal of International Affairs prepare the issues of that journal under the supervision of the faculty advisors. Admission by consent of the instructor only.
- 68.481 INDEPENDENT STUDY (3) Individual and supervised study in selected areas of political science. Prerequisite: Eighteen hours of political science. Admission by consent of instructor only.
- 68.485 DEMOCRATIC THEORY SEMINAR (3) This course attempts to trace the sources of Democratic Theory to their 16th century origins and to analyze the variants to that theory which have been proposed since that time. Prerequisite: 68.428.
- 68.487 SEMINAR IN POLITICAL SCIENCE (3) Various methods and techniques of research in political science, culminating in the preparation of a seminar paper. Prerequisite: eighteen semester hours in political science, or consent of instructor.
- 68.491 SEMINAR IN CONTEMPORARY UNITED STATES FOREIGN POLICY (3) An examination of the nature, basis, and instruments of American foreign policy in the contemporary age. The formulation, control, and execution of American foreign policy will also be noted. Prerequisites: 68.303, and History 40.146, or consent of instructor.
- 68.497 PRACTICUM IN POLITICS (3-9) An internship program in government and/or politics. Prerequisite: Junior standing, major in political science, and consent of the department.

Education

Professors: BROYLES, BURRIER (*Graduate Coordinator, Secondary Education*), CORNTHWAITE, DUMAS, ELY-FLICKINGER, FITZGERALD (*Graduate Coordinator, Elementary Education*), GUTKOSKA (*Director of Reading*), B. HAUSERMAN (*Associate Dean; Director of Teacher Education*), HEAGNEY, JESSUP (*Chairman, Department of Secondary Education*), KILEY, KIMSEY (*Graduate Coordinator, Early Childhood Education*), KJER (*Chairman, Department of Early Childhood Education*), LINDNER, SCHMID (*Chairman, Department of Elementary Education*), SPRAGUE, VAN NORMAN (*Director of Professional Programs*), WESLEY, WILLIAMSON, WILLIS.

Associate Professors: BARBOUR (*Director of Laboratory Experiences*), BELLOWS, BINKO (*Associate Director of Laboratory Experiences*), BRAMBLETT, BRANDWINE, BRODBELT, COHEN, COLIMORE, COX, EPSTEIN, GARNER, HANSON, N. HAUSERMAN (*Director of Research, Lida Lee Tall Learning Resources Center*), HELFRICH, LEWIS, LOOMIS, B. TAYLOR (*Director, Lida Lee Tall Learning Resources Center*), TRITCH, VELDER, WALL, WILLIAMS.

Assistant Professors: BEHLING, BOND, BOYD, CARPENTER, COHN, FINK, FLAD, FRIEMAN, GEHRING (*Coordinator of Educational Technology*), HOLMES, HUGHES, KARFGIN, LINDSAY, MARTIN, NICHOLAS, O'NEILL, POUR, RAY, SMITH, SUHORSKY, M. TAYLOR, TROUPE, VLANGAS, WATERS, WILNER (*Librarian, Lida Lee Tall Learning Resources Center*).

Instructors: BALDWIN, BEINER, JORDAN, LAWLOR, LOUDERMILK, LUDLOW, LYONS, MCGILL, OLSON, PATRICK, POLLACK, SHORES.

Visiting Lecturers: BLAKE, HAWKINS, LAMB, MEDWIN, NASS, MAY.

LIDA LEE TALL LEARNING RESOURCES CENTER

The Lida Lee Tall Center is primarily a research facility at Towson State College focusing on major problems of education. With a strong focus on applied or field research, the Lida Lee Tall faculty and staff provide direction for educators in the continuing challenge of educational inquiry.

There are many opportunities for educational research at the Lida Lee Tall Center. With the guidance of a full time research director, the following are available for perspective researchers:

1. A nursery school program for two year old children, with parents having full organizational and administrative responsibility;
2. A nursery school program for four and five year old groups of children, closely allied with the Early Childhood Department of Towson State College;
3. A full-time day care center for three and four year old children, working closely with the Early Childhood Department of Towson State College;
4. An educational media teaching and learning center emphasizing the development of learning stations which are used independently by children;
5. Closed circuit programming (in the planning stage) focusing on instructional strategies;
6. A Parent Lounge focusing on the development of Parent-Teacher partnerships;
7. A fully equipped and staffed reading center serving Lida Lee Tall as well as the community at large;
8. Special facilities and programs in art, music, physical education, drama, theatre arts, language and speech;
9. Current standardized test data on file for every child in the Lida Lee Tall Learning Resources Center;
10. An innovative "family" or "vertical" grouping of children in one class, similar to the British infant school organization, with an age span of four and one half years to almost nine years of age;
11. A liaison with the computer center for the Maryland State Colleges which is located on this campus.

In order to share the results of the research studies carried out at the Center, our publication called "Probe," (Probing Resources of Better Education) is distributed nationwide.

The Lida Lee Tall Center welcomes inquiries from students, faculty, or anyone interested in exploring the parameters of the educational milieu.

The Teacher Education Program

The Teacher Education program is designed to help the student mature in the varied understandings and competencies needed by the beginning teacher. Building upon the foundation of a sound general education, the student is guided toward an understanding of the child, the school, and the educative process. Teacher Education students may include in their professional program such experiences as the following: observation and participation in open space schools, as well as self-contained classrooms; utilization of micro-teaching and videotaping; and familiarization with social agencies in the school community. Increasingly, efforts are being made to individualize aspects of the student's professional program. All aspects of the programs have as their major objective the development of teachers who are broadly prepared individuals, who work well with children and youth, and who are ready and able to take intelligent action on current educational issues.

Entering the Program

Students who plan to enter one of the education programs should file an application with the Education Department Office no later than the second semester of the sophomore year. (Those who transfer to Towson in their junior or senior year should file an application in their first semester at Towson.) Students must update their application forms regularly. To be eligible, students must be in good standing, have a college cumulative average of 2.00 plus and satisfy the requirements of the Screening-Advisement committee.

Entering Student Teaching

All Teacher Education students must apply for student teaching on a form provided by the Director of Laboratory Experiences during the semester preceding the student teaching experience. (Secondary majors must also meet the academic requirements of the department involved.)

Each Teacher Education student who has reached the appropriate level of competency is placed in one of eight to ten cooperating school systems. Opportunities are available in rural or urban schools, "self-contained" or "open-space" classrooms, with individual teachers or with teams. Students may be placed in schools where methods courses are taught by a college supervisor, or individual placements are made for students who have taken methods courses on campus. Every attempt is made to secure the available placement that best meets the needs of the individual.

Differentiated student teaching may be taken by students who secure special permission from the Director of Laboratory Experiences.

Numbering of Courses

The numerical prefixes indicate teacher education programs as follows: 25 Early Childhood Education, 26 Elementary Education, 27 Secondary Education as well as Dual Certification programs and Adult Education courses, 28 Special Certification programs. Prefix 29 designates courses which may apply to a number of programs.

Following the prefix: courses numbered 0 to 99 are new "experimental" courses; courses numbered 100 to 299 are termed "lower division"; and courses numbered 300 to 499 are termed "upper division" and normally have prerequisites. Some upper division courses and all courses numbered 500-699 are taken by graduate students.

For detailed information about graduate and evening programs, consult the specialized catalogs for those studies.

EARLY CHILDHOOD EDUCATION PROGRAM

Undergraduate Program

The early childhood education major is designed for students who have an interest in working with young children from birth through age eight. It is built on the premise that special capabilities and understandings are necessary to teach successfully in the preschool and primary grades. There is a demand for specialization by men and women in early childhood education.

The major in early childhood education leads to State Certification to teach nursery school, kindergarten, and primary grades. It also prepares students for positions in other programs for young children such as day care centers, parent and child centers, private and other non-public preschools and primary programs.

To meet both the College and Maryland State Certification requirements in general education (academic work) the student must complete a total of 80 hours in the arts and sciences. The required professional education courses in early childhood education total 35 or 36 hours. The remaining hours are elected by the student to obtain the total of 128 hours needed for graduation. For specific details of the early childhood education program see the guide included in this section on page 84.

Deviations from the program pattern for early childhood education majors are permitted only with the consent of the Chairman of Early Childhood Education. In addition to the major in early childhood education, a student, by using his elective hours carefully, may develop a major or a minor in a subject matter area.

It is recommended that the student seek an adviser at the earliest possible time.

Alternate Major in Early Childhood Education—The Evening College

As a service to teachers who wish to pursue work toward a degree in early childhood education while they are on their teaching assignments and to other workers in various programs for young children, the Evening College offers an alternate program during evening and summers for the preparation of nursery school, kindergarten, day care center, and primary teachers which will enable them to major in early childhood education. See Evening College Bulletin for further information.

Undergraduate

25.101 THE YOUNG CHILD AS A LEARNER (3)

Introduction to the developing child and educational programs available for young children. Focuses primarily on the child himself. Prerequisite: Approval of the Department.

25.102 THE CURRICULUM FOR YOUNG CHILDREN (3)

Curriculum content and methods of teaching in programs for young children. Prerequisite: Child Psychology, Child Growth and Development, 25.101, or approval of Department of Education.

25.121 LABORATORY EXPERIENCES IN PROGRAMS FOR YOUNG CHILDREN (3)

Practical application of educational theory through observation of and participation with young children in classroom situations. Con-

current with EDUC 25.102, summers only. Prerequisite: 25.101 or a course in child psychology, child growth and development, or approval of Department of Education.

25.301 MATERIALS AND EXPERIENCES FOR THE YOUNG CHILD (3)

Stimulating the intellectual, physical, social, and emotional development of young children through the use of varied instructional materials and activities. Prerequisite: Six hours of Early Childhood Education or approval of Department of Education.

50.321 TEACHING MATHEMATICS IN EARLY CHILDHOOD EDUCATION (2)

(Course description will be found under the Mathematics Department listings.)

TOWSON STATE COLLEGE — EARLY CHILDHOOD EDUCATION

Major in ECE, including TSC, Departmental and State Certification Requirements Leading to Certification to Teach and Work with Children Ages Three through Eight Years.

COLLEGE AND DEPARTMENTAL COURSE REQUIREMENTS

ART	Credit	PSYCHOLOGY	
12.105 Art in the Culture	3	70.101 Gen. Psychology	3
Elective	3	70.211 Child Psychology	3
ENGLISH		HISTORY	
30.102 Freshman Composition	3	Elective	6
Elective	6	GEOGRAPHY	
MUSIC		34.101 or 102 Elements of Geog.	3
54.101 Intro. to Music Lit.	3	SOCIOLOGY	
Elective	2	80.101 Intro. to Sociology	3
SPEECH		Elective	3
87.105 Speech & Lang. Dev.	3	HEALTH	
SCIENCE		38.101 Current Health Prob.	3
14.101 Fund. of Biology	4	PHYSICAL EDUCATION	
64.101 Physical Science I	4	Elective	2
14.303 Life Science OR		TOTAL GENERAL EDUCATION	66
64.303 Earth-Space Science	3		
MATHEMATICS			
50.204 Fund. Concepts of Arith.	3		
50.205 Gen. College Math.	3		

Note: To meet certification requirements, students must choose 14 additional hours in academic subjects (Art & Sciences) for a total of 80 semester hours of academic work.

TOTAL NUMBER HOURS REQUIRED IN ACADEMIC SUBJECTS

AT LEAST 80

ACADEMIC ELECTIVES

Select other courses in Sociology, Psychology, Music, Art, Speech and Drama, Health, Foreign Language, Political Science, Economics, Philosophy, Geography, Government, Science, English, History.

PROFESSIONAL TEACHER EDUCATION COURSES—MAJOR IN EARLY CHILDHOOD EDUCATION

28.101 Careers in Education	2	25.343 Prof. Block III	2
70.201 Educational Psychology	3	25.351-352 Student Teaching	10
25.341 Prof. Block I	5	Two terms of 8 wks. each on two different age or grade levels (NS-KDG/Primary)	
25.342 Prof. Block II	4	29.401 Foundations of Education	3
50.321 Prof. Block II—Teaching Math. in ECE	2	Approved elective for ECE	1
25.361 Prof. Block II—Teaching Reading in ECE	3		

TOTAL NUMBER PROFESSIONAL REQUIREMENTS FOR MAJOR IN EARLY CHILDHOOD EDUCATION
AT LEAST 35

APPROVED ELECTIVE COURSES FOR EARLY CHILDHOOD EDUCATION MAJORS:

Educ. 29.417, Child. Lit. (3); Educ. 25.421, Prob. in ECE (3); Sp. 84.375, Sp. in Elem. School (3); Theater 86.307, Teacher Arts for Children (2); Art 12.371, Art & the Child (2); Music 54.307, Tchg. Mus. in the Elem. School (2); Educ. 25.301, Mat. & Exp. for Young Child. (3); Educ. 25.355 Differentiated Stud. Tchg. in ECE (1-8); Educ. 25.411, Teachers & Parents: Partners in ECE (3); Educ. 25.413 Infants and Children Under Three (3); Educ. 25.415 Day Care Cnt. (3); Educ. 25.417 Learning Disabilities in Young Children (3); Educ. 25.419 Measurement and Evaluation in ECE (3).

TOTAL NUMBER HOURS REQUIRED FOR GRADUATION

128

- 25.341 PROFESSIONAL BLOCK I THE RELATED ARTS AND SCIENCES OF THE ARTS (5)** Interdepartmental instruction by specialists in art, music, physical education and science with emphasis on the personal development of the becoming teacher and coordinated by a faculty member from Early Childhood Education program. Classroom participation. Prerequisite: Open only to Early Childhood Education Majors. Educational Psychology and Child Psychology or approval of Department of Education.
- 25.342 PROFESSIONAL BLOCK II CURRICULUM ANALYSIS AND METHODS OF INSTRUCTION (4)** Emphasis on objectives, materials, and methods of teaching the language arts, and social studies in programs for young children. Participation one day weekly in an assigned classroom for young children. Prerequisite: Open only to Early Childhood Education Majors. 25.341 or its equivalent.
- 25.343 PROFESSIONAL BLOCK III CURRICULUM CONCEPTS IN EARLY CHILDHOOD (2)** Parallels student teaching and is concerned with classroom problems encountered in student teaching. Prerequisites: 25.341 and 25.342 or the equivalent. Open only to Early Childhood Education Majors.
- 25.351, 352 STUDENT TEACHING IN EARLY CHILDHOOD (10)** Assignment in nursery school, kindergarten, and primary grades or other types of programs for young children under expert guidance. Two terms of approximately 8 weeks at two different age levels, four consecutive days weekly. Concurrent with 25.343.
- 25.355 DIFFERENTIATED STUDENT TEACHING IN EARLY CHILDHOOD (1-8)** Student teaching experiences in addition to those in required student teaching courses (25.351, 25.352), according to needs and interests of the student. This experience may be in public schools, or may occur in such centers for young children as Day Care Centers, Parent-Child or Infant Centers, hospitals, or other special programs in early childhood education. Prerequisite: Approval of student's adviser, Chairman of Early Childhood Education, and Director of Laboratory Experiences.
- 25.361 TEACHING READING IN EARLY CHILDHOOD EDUCATION (3)** Teaching reading in early childhood education with special emphasis on early learning as related to the reading process and the teaching of beginning reading. Critical examination of content, procedures, materials in programs for nursery school through third grade. Prerequisite: Major in Early Childhood Education.
- 25.403 CURRICULUM IN PRIMARY EDUCATION (3)** The child, curriculum content, methods and materials of teaching, and program organization in the primary school years. Evenings and Summers only. Prerequisite: 6 semester hours of Early Childhood Education. (G)
- 25.411 PARENTS AND TEACHERS: PARTNERS IN EARLY CHILDHOOD EDUCATION (3)** The development of a rationale for improved parent-teacher relationships in early childhood education programs. The role of para-professionals and specialists and volunteers. Observation, participation, home and school visits by teachers and parents functioning as a team. Prerequisites: Six hours of Early Childhood Education. (G)
- 25.413 INFANTS AND CHILDREN UNDER THREE (3)** Nature of the infant and very young child. Types of programs providing care of infants and children under three. Focus on developmental needs. Organization, curriculum, and methods of working with parents and children. Observations. Resource persons from allied agencies. Prerequisites: 6 hours Psychology; 6 hours Early Childhood Education; or approval of Chairman, Early Childhood Education. (G)
- 25.415 THE DAY CARE CENTER (3)** An interdisciplinary course designed to prepare day care personnel. Resource persons from related agencies will participate. Topics include purposes of day care, problems of organization, administration and supervision, records, programs, community interaction, and parent relations. Field trips and observation of day care centers. Prerequisites: 6 hours of Early Childhood Education or approval of Department of Education. (G)
- 25.417 LEARNING DISABILITIES IN YOUNG CHILDREN (3)** Survey of the nature of learning disabilities in the young child; theoretical positions; current research; neurological aspects involved; major categories; evaluative and remediation procedures are presented. Seminar-discussion and programmed units. Prerequisites: 6 hours of psychology and 6 hours of Early Childhood Education. (G)
- 25.419 MEASUREMENT AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)** Backgrounds and principles of assessment in early childhood education. Statistical concepts. Types of instruments and methods for evaluating growth and achievement of young children. Prerequisite: 6 hours of psychology and 6 hours of Early Childhood Education. (G)
- 25.421 (26.381) PROBLEMS IN EARLY CHILDHOOD EDUCATION (3)** Research findings used as a basis for program planning in nursery school, kindergarten and primary grades; current trends and issues are considered. Prerequisite: student teaching and/or teaching experience in preschool or primary grades; junior standing; approval of Department of Education. (G)
- 25.423 (26.391) LABORATORY EXPERIENCES IN EARLY CHILDHOOD EDUCATION (3)** Classroom experiences with children in pre-

school and primary grades in a variety of teaching-learning situations. Analysis of observations in light of current research. Concurrent with 25.421. Summers only. Prerequisites: junior standing and approval of Department of Education. (G)

25.494 TRAVEL AND STUDY: EARLY CHILDHOOD EDUCATION (1-6) Study abroad of educational facilities, programs or practices, or selected projects in education topics. By special arrangement with the program chairman and sponsoring instructors.

25.495 INDEPENDENT STUDY: EARLY CHILDHOOD EDUCATION (1-4) An opportunity

for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Consent of program chairman.

25.496 DIRECTED READING: EARLY CHILDHOOD EDUCATION (1-4) Independent reading in selected areas of Early Childhood Education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the Department to major students.

G—may be available for graduate credit. See graduate bulletin.

Graduate Only

25.509 GROWTH AND DEVELOPMENT OF YOUNG CHILDREN (3) Study of findings of current research in growth and development of young children; methods of studying and evaluating behavior; implications of case study data for curriculum improvement. Prerequisite: Psych. 70.511 (501) and consent of the Department of Education.

25.521 READING IN EARLY CHILDHOOD EDUCATION: ADVANCED (3) Emphasis on contemporary issues; advanced interpretation and critical evaluation of research in language development and reading instruction in light of basic needs, developmental levels, and individual differences in young children. Prerequisites: Undergraduate course in reading and consent of the Department of Education.

25.547 THE TEACHING PROCESS: EARLY CHILDHOOD EDUCATION (3) Study of recent theories, methods, and findings in research on the teaching process. Analysis of

teaching behaviors and exploration of teaching strategies in educational programs for young children. Prerequisite: Teaching experience, Psych. 70.511 or 29.501, and consent of Department of Education.

25.553 PERCEPTUAL AND COGNITIVE DEVELOPMENT OF YOUNG CHILDREN (3) Survey of significant research affecting the theory and programs of education for children ages three to eight years. Prerequisites: Psych. 70.511 and/or Educ. 25.509 and consent of the Department of Education.

25.573 SEMINAR IN EARLY CHILDHOOD EDUCATION (3) Seminar approach to current practices and trends in curriculum, materials, methods, and organization of educational programs for children ages three through eight years. A seminar paper is required. Prerequisite: Nine hours of graduate work in Early Childhood Education and 29.691.

25.599 MASTERS THESIS IN EARLY CHILDHOOD EDUCATION

Master of Education in Early Childhood Education

For more detailed information regarding the Master of Education in Early Childhood Education see the Graduate Studies Bulletin.

Elementary Education Program

Undergraduate Program

The major in elementary education leads to certification to teach grades 1 through 6, grades 1 through 8 in the middle schools organization, and grade 9 provided content requirements for secondary certification are met. The program is designed to integrate classroom and laboratory experiences in such ways as to prepare students for beginning teaching in public schools.

In meeting the general course requirements and certification requirements the student must complete at least 80 hours in arts and sciences; at least 35 hours in professional education, and electives, to make a total of 128 semester hours. A checklist guide can be found on page 88.

A concentration of related courses or a major in arts or sciences is desirable for the student in elementary education.

Deviations from the program pattern for elementary majors (i.e. in content or sequence of professional education courses) are permitted only with the written consent of the Chairman of Elementary Education.

Elementary Education Major with Mathematics Minor: Through a cooperative program of the Elementary Education and Mathematics Departments, students can use a middle school student teaching experience as a route to elementary certification with a mathematics minor. Interested students should consult with the chairmen of the Elementary Education and Mathematics Departments as early in their college program as possible.

Elementary Majors may arrange programs with minors in other selected areas by arrangement with the chairman of Elementary Education and the chairman of the other department concerned.

Master of Education in Elementary Education

For detailed information regarding the Master of Education in Elementary Education see the Bulletin of Graduate Studies.

Master of Education in Reading

The Master of Education Degree Program in Reading is designed to offer experiences that will improve the teaching of reading at all levels from kindergarten through college. Specifically, the program seeks to offer courses in reading for teachers and administrators who are interested in improving their knowledge of reading and to prepare reading clinicians to teach developmental, corrective, and remedial reading. Furthermore, the program is designed to prepare reading specialists who will be capable of filling learnership roles in reading improvement programs in schools and clinics.

The Course Requirement for the Degree include 29.621, 29.623, 29.625 and 29.629 and are listed under the prefix 29 "Other Education Courses." Detailed information regarding the program is given in the Bulletin of Graduate Studies.

ELEMENTARY EDUCATION COURSES

Undergraduate Courses

- 12.371 (12.371) ART AND THE CHILD (2-3)
Major considerations of art education appropriate to the work of the elementary teacher; experiences in planning and teaching art.
- 12.471 ADVANCED ART EDUCATION (3) (See Art Dept. Listings.)
- 12.475 (12.375) TEACHING ART IN THE ELEMENTARY SCHOOL (2) Concurrent course with 396, Art in the Secondary School. For course description see 396. Open only to Art Education Majors. Prerequisite: Consent of Art Department.
- 14.303 LIFE SCIENCE IN THE ELEMENTARY SCHOOL (3) Emphasis placed on the conceptual approach to science teaching, the modes of scientific inquiry, and the utilization of living organisms in the classroom. Prerequisite: 14.101. Register through Education Department.
- 50.323 (50.323) TEACHING MATHEMATICS IN ELEMENTARY SCHOOL (2 or 3) Nature of Instruction. Organization of units of instruction. Provisions for developing understandings. New programs and research findings. Techniques of evaluation. Required of all Elementary Education Majors. Prerequisite: 50.204 and 50.205.
- 50.325 TEACHING MATHEMATICS IN THE MIDDLE SCHOOL (3) (See Math. Dept. Listings.)
- 50.421 MATHEMATICS EDUCATION FOR INSERVICE ELEMENTARY SCHOOL TEACHERS (1-4) (G) (See Math Dept. Listings.)
- 50.427 READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (1-3) (G) (See Math Dept. Listings.)
- 54.307 (54.345) TEACHING MUSIC IN THE ELEMENTARY SCHOOLS (2) Acquaints students with music programs in the elementary school through lecture, class discussion, and practice with children. Prerequisite: 54.233. 2 credits (non-music major), 3 credits (music majors). Day, night, and summer school.
- 60.324 (60.324) TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (2) Observation and participation at Lida Lee Tall Learning Resources Center. Time is devoted to planning, preparation, and presentation. Prerequisite: Any non-major physical education courses totaling a minimum of one credit for general education requirements and physical education 60.101 and 60.102.
- 64.303 EARTH-SPACE SCIENCE IN CHILDHOOD EDUCATION (3) Physical science principles used to develop Earth-Space science concepts. Emphasis on the individualized discovery approach as may be applied

CHECK LIST OF DEGREE REQUIREMENTS FOR ELEMENTARY EDUCATION STUDENTS

Courses starred (*) should be completed before Student Teaching.

128 semester hours, including at least—

A. ARTS AND SCIENCES, 80 hours including:

SCIENCE—14 hours ¹		
*14.101	4	Fundamentals of Biology
*64.101	4	Physical Science I
*14.303	3	Life Science in Elem. School
64.303	3	Earth-Space Sci. in Childhood Ed.

PSYCHOLOGY (General)—3 hours		
*70.101	3	General Psychology

MATHEMATICS—6 hours		
*50.204	3	Fund. Concepts of Arithmetic
*50.205	3	General College Mathematics

ART—2 hours		
*12.		

MUSIC—2 hours		
*54.233	2	Music Fundamentals

PHYSICAL EDUCATION—2-3 hours		
*60.009-059	1	Freshman Physical Education
*60.101	1	Sophomore Physical Education ²
*60.102	1	Sophomore Physical Education ²

HEALTH—2-3 hours		
*38.101	3	Current Health Problems

ENGLISH—12 hours		
*30.102	3	Freshman Composition

*30.	3	
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*30.	3	
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30.	3	
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SPEECH, DRAMA, OR
PHILOSOPHY—2-3 hours

SOCIAL SCIENCES—15 hours³

*34.102	3	Elements of Geography
*40.	3	History
*40.	3	History
40.	3	History
*	3	Econ., Pol. Sci., or Sociology

TOTAL 60-63 hours

B. PROFESSIONAL EDUCATION, 36 hours including:

*29.101	2	Careers in Education
29.401	3	Foundations of Education (Prerequisite: Student Teaching)
*70.201	3	Educational Psychology
29.315	2	Ed. Meas. for Clrm. Teachers

MUST BE TAKEN CONCURRENTLY IN CURR. I SEMESTER

*26.361	4	Elem. Curriculum I (Overview; Reading Methods)
*50.323	2	Tchg. Math. in Elem. School

*TWO of the Following THREE⁴

12.371	2	Art and the Child and/or
54.307	2	Tchg. Music In Elem. School and/or
60.324	2	Tchg. Phys. Ed. In Elem. School

MUST BE TAKEN CONCURRENTLY

26.462	6	Elem. Curriculum II (Methods in Read., Lang. Arts, Soc. Studies)
26.497	10	Student Teaching

TOTAL 36 hours

EDUCATION ELECTIVES

ELECTIVES IN ARTS AND SCIENCES—at least 17-20 hours. A major is desirable.

¹ Science transition pattern: 14.101, 64.101, 4-hour elective, and 14.303 or 64.303.

² Required of all students who take 60.324 Teaching Physical Education in the Elementary School.

³ Some counties and states require 40.145-146 United States History.

⁴ The student must take prerequisite courses in Art, Music, and/or Physical Education for the two chosen. The third methods course may be taken as an elective after Student Teaching.

Schedules for Elementary Curriculum I and II semesters will be provided by the Department.

- to elementary school science instruction. Prerequisite: 64.101. Register through Education Department.
- 76.375 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (2)** Significance of science for the elementary school child; its contribution toward his development; criteria for selecting science experiences for children.
- 76.488 AEROSPACE EDUCATION WORKSHOP (3)** In cooperation with CAP, USAF, NASA and others. The general principles of aviation and space exploration with emphasis on teaching materials, resources and field experiences for K-12 teachers, supervisors, administrators and students of teaching. Special requirement: Students must complete registration or notify director 30 days prior to first class in order to qualify for Air Force flights. Offered summers only.
- 78.375 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3)** Locating, organizing, synthesizing, and interpreting fundamental social information. Evenings and summers only; part of Curriculum II in day program.
- 84.375 SPEECH IN THE ELEMENTARY SCHOOL (See Communications Dept. Listings.)**
- 26.305 (26.405, 26.001) CREATIVE EXPRESSION (6)** Experiences in planning and teaching an integrated and creative program of art, music and physical education activities at the elementary level. To be taken concurrently with Curriculum I. Prerequisite: Art, 2 or more hours; Music 54.233; Ph. Ed. 60.101, 60.102.
- 26.311 (26.411) CHILD AND THE ELEMENTARY SCHOOL CURRICULUM (3)** The child, the school, and community, and the curriculum of the modern elementary school are interpreted in terms of the roles and functions of the public school in a democratic society. Prerequisite: 70.101, 70.201. Evenings and summers only.
- 26.321 (26.401, 26.421) TEACHING LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3)** Language needs and abilities of children. Development of effective language skills with emphasis on reading. Evenings and summers only; part of Curriculum II in day program.
- 26.323 (26.423) TEACHING READING IN THE ELEMENTARY SCHOOL (3)** Introduction to reading in the elementary school. A survey of varied approaches with emphasis on skills development. Evenings and summers only; part of Curriculum I in day program.
- 26.361 (26.461) ELEMENTARY CURRICULUM I (4)** Foundations of reading instruction and an overview of elementary schools including curriculum, organization, planning, evaluation, teacher characteristics; observation and participation in public schools. Prerequisite: Consent of Education Department.
- 26.427 (26.453) READING AND OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL—ADVANCED (3)** Application of theory and research to the teaching of reading and the other language arts. Prerequisite: 26.321, 26.323, or 26.462. May be taken for graduate or undergraduate credit in evenings and summers. (G)
- 26.429 (26.454) METHODS AND PRINCIPLES OF READING INSTRUCTION—ADVANCED (3)** Principles involved in building a developmental reading program; prevention of reading difficulties; methods of remedial reading. Prerequisite: 26.323 or 26.462. May be taken for undergraduate or graduate credit in the evenings and summers. (G)
- 26.441 CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL (2-3)** The child and his curriculum. The teacher's role in curriculum as a process. Principles and philosophies of curriculum development. Objectives, practices, materials, and evaluation trends. Prerequisite: 26.497. (G)
- 26.462 (26.362) ELEMENTARY CURRICULUM II (6)** Integration of language arts (spelling, writing, literature, listening, usage, vocabulary development), social studies (nature of groups, research units, history, economics, government, sociology), and advanced reading instruction. Prerequisite: Elementary Curriculum I and consent of Education Department. To be taken during student teaching semester.
- 26.494 TRAVEL AND STUDY: ELEMENTARY EDUCATION (1-6)** Study abroad of educational facilities, programs, or practices, or selected projects in Elementary Education topics. By special arrangement with program chairman and sponsoring instructors.
- 26.495 INDEPENDENT STUDY IN ELEMENTARY EDUCATION (1-4)** An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Consent of program chairman.
- 26.496 DIRECTED READINGS IN ELEMENTARY EDUCATION (1-4)** Independent reading in selected areas of Elementary Education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the Department to major students.
- 26.497 (26.397) STUDENT TEACHING IN ELEMENTARY SCHOOL (6-10)** Ten to twelve weeks, full time, in public school classrooms under the guidance of master teachers. Conferences with the college supervisor. Prerequisite: Consent of Education Department. (Variable credit in Art, Music, and Physical Education.)

(G) May be available for graduate credit. See Graduate Bulletin.

26.498 (26.497) DIFFERENTIATED STUDENT TEACHING—ELEMENTARY (1-8) Student teaching experiences in addition to those in 26.497 or student teaching in special subject areas, according to needs and interests of the student. Prerequisite: Consent of the Director of Laboratory Experiences.

Graduate Only

50.521 SEMINAR IN TEACHING ARITHMETIC (3) (See Math Dept. Listings.)

76.585 SEMINAR IN ELEMENTARY SCHOOL SCIENCE (3) Seminar approach to current practices and trends in organizing, teaching and improving programs in elementary school science. A seminar based on action research is required. Prerequisite: At least three basic science courses and elementary teaching experience.

78.585 SEMINAR IN ELEMENTARY SCHOOL SOCIAL STUDIES (3) Trends, content, issues, and materials in the teaching of social studies. Each student will be expected to explore in depth one aspect of the subject and present his findings to the group. (G)

26.616 (26.516) THE ADMINISTRATION OF THE ELEMENTARY SCHOOL (3) Analysis of principles of elementary school administration, the administrator's roles and responsibilities, human relations and personnel management, public relations, management of the school unit and curriculum. Prerequisite: Three years teaching experience, teacher certification and nine hours of graduate credit.

26.647 THE TEACHING PROCESS: ELEMENTARY EDUCATION (3) Study of recent theories, methods, and findings in research on the teaching process. Analysis of teaching strategies in educational programs for elementary children. Prerequisite: Teaching experience, and PSYCH 70.511 (70.501) and consent of Department of Education.

26.648 INDIVIDUALIZING LEARNING IN THE ELEMENTARY SCHOOL (3) Consideration is to be given to the theory of individualizing learning and to the related restructuring of organizational patterns. Emphasis is to be placed on behavioral objectives, learning centers, listening stations, task folders, and media centers. A project is required. Prerequisites: Certification and Teaching Experience or Consent of Instructor.

26.665 (26.525) THEORETICAL AND PRACTICAL BASES OF CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL (3) History of curriculum development in the elementary school; basic considerations affecting curriculum development; patterns of organization; objectives, practices and evaluation; problems in curriculum development. Prerequisite: Consent of instructor.

26.675 (575) SEMINAR IN ELEMENTARY EDUCATION (3) Scientific investigation of selected aspects of education with emphasis on classroom application. A paper involving description and evaluation of the investigation will be required. Prerequisite: 30 hours of graduate work including 29.691.

26.681 (26.581) SEMINAR IN ELEMENTARY SUPERVISION (3) Role of the supervisor; supervisory practices and techniques. Students may concentrate in areas related to their professional interests. Prerequisite: Nine hours of graduate work.

26.699 MASTERS THESIS IN ELEMENTARY EDUCATION

Secondary Education and Dual Certification Programs; Adult Education

The programs of education for junior and senior high school teachers are designed to bring about a close integration between teaching methods and the practical experiences of observation and student teaching. After introductory courses in the nature of today's schools and their students, the prospective secondary teacher enters the student teaching semester. Methods, philosophy, techniques, and practice are combined to provide a thorough preparation for teaching. The student teaching semester is followed by a course in the sociological, philosophical, psychological, and historical foundations of education.

There is not simply a single "Secondary Education" major. Rather, a student must satisfy the general course requirements of the college and complete a major in a department whose subject area is among those for which a secondary school teaching certificate may be issued. In *addition* to this major, the following courses are required in Teacher Education:

<i>Professional Courses Required</i>	<i>Sem. Hrs.</i>	<i>When Taken</i>	
		<i>Year</i>	<i>Semester</i>
(29.101) Careers in Education	2	I or II	1 or 2
(70.201) Educational Psychology (Prerequisite: General Psychology)	3	II	1 or 2
(27.341) Principles of Secondary Education— (Prerequisite: 70-201)—Taken the semester prior to student teaching	3	III	1 or 2
(27.360) Teaching Reading in the Sec. Sch. (Above course required of English and Social Science majors—recommended to others. Taken concurrently with Principles of Sec. Ed.)	3	III	1 or 2
Methods of Teaching Major Subject (Taken during Student Teaching semester)	3	III-2	or IV-1 or 2
(13.369) Educational Media Laboratory* (*Above course is combined for those students teaching in a Middle School Center in a 3 credit course titled "Teaching in the Middle School." In the case of Music Majors it is also combined in a 3 credit methods course.)	1	III-2	or IV-1 or 2
(27.398) Student Teaching (A minimum grade of "C" in Principles of Secondary Ed. or Survey of Educa- tional Programs, and in teaching methods is one of the pre-requisites. Students must also satisfy academic requirements of the departments concerned.)	10	III-2	or IV-1 or 2
(29.401) Foundations of Education Prerequisite: Student Teaching	3	IV	1 or 2

The following Majors are recognized for Secondary Certification. The list-ings here are general guides only and subject to revision by the departments concerned. Students must check with the appropriate department to be sure all details of the requirements for the major are fulfilled. It is also the student's responsibility to see that he is meeting the State Requirements under which he wishes certification.

Biology

Required in Major (30 hrs.): 101 Fundamentals of Biology (4); 105 General Botany (4); 109 Functional Anatomy of Vertebrates (4); 331 Field and Sys-tematic Botany (4); 351 Field and Systematic Vertebrate Zoology (4); 401 Genetics (4); plus 6 semester hours of electives from departmental offerings.

Required in Related Subjects (23 hrs.): 101-102 General Chemistry (8); 231 Organic Chemistry (4); 211-212 General Physics (8); 115 Mathematics I (3).

Chemistry

Required in Major (38 hrs.): 101-102 General Chemistry (8); 211 and 411 Analytical Chemistry (8); 231-232 Organic Chemistry (10); 341-342 Physical Chemistry (8); 422 Inorganic Chemistry (4).

Required in Related Subjects (26 hours.): Fundamentals of Biology (4); General Physics I and II (8); Mathematics I and II (6); Calculus I and II (8).

English

Required in Major (36 hrs.): Freshman Composition (or Advanced Freshman English) (3); English Literature (6); Elements of Poetry (2); Approaches to English Study (2); plus 23 hours from departmental offerings (four of which may be lower division courses). At least one course must be chosen from offer-ings in each of the following areas: Language or Literary Criticism; Literature Beginnings to 1700; Literature 1700 to 1832; Literature 1832 to 1900; Indi-vidual Major Authors; One course must be in American Literature.

Intermediate level of a foreign language is strongly recommended.

Teacher education majors are also required to take 27.360 Teaching Reading in the Secondary School and elect either 30.332 Comparative Grammar, or 30.431 Structure of the English Language. Either 30.327 Structural Linguistics, or 30.430 History of the English Language is strongly recommended. Other recommended electives for Teacher Education Majors are: 30.226 Introduction to Classical Mythology; 30.331 Advanced Exposition; 30.401 Literature of Black America; 84.106 Voice and Diction; 84.213 General Semantics; 27.359 Contemporary Materials for Teaching English in Secondary Schools; 27.358 Teaching Composition in the Secondary School. And from Morgan State College: Introduction to the Negro in American Literature, The Negro in American Prose, and American Folklore.

French

Required in Major (27 semester hours beyond the Intermediate [2nd year] Level of the Language): 321-322 Survey of French Literature I & II (6); 301-302 Advanced Conversation and Composition (6); 391 Advanced Grammar (3); plus 12 additional semester hours of electives in the major. French Phonetics (32.395) is highly recommended before student teaching.

General Science (Natural Science)

Required in Major (51 hrs.): 101-102 General Chemistry (8); 101 Fundamentals Biology (4); 211-212 General Physics (8); 105 General Botany (4); 109 Functional Anatomy of Vertebrates (4); 211 Analytical Chemistry or 231 Organic Chemistry (4); 121 General Geology (3); 211 General Astronomy (3); Advanced Laboratory 291 or 491 or 401 (2); Electives (11).

Required in Related Subjects (3 hrs.): 115 Mathematics I (3).

Geography

Required in Major (30 hrs.): Lower Division (100's-200's) courses (9); Upper Division (300's-400's) courses (21). (At least 9 hrs. of which must be courses designated as systematic or technique courses).

German

Required in Major (27 Semester Hours beyond the Intermediate [2nd year] Level of the Language.): 321-322 Survey of German Literature I & II (6); 301-302 Advanced Conversation & Composition I & II (6); 391 Advanced Grammar (3); plus 12 additional semester hours of electives in the major.

Health Education

Required in Major (43 hrs.): 101 Current Health Problems (3); 103 First Aid (2); 401 Sex Education & Family Living (3); 202 Principles and Practices of Public Health (3); 201 Health Education in the School I (3); 205 Health Education in the School II (3); 405 Drugs in Our Culture (3); 302 Preparation for Field Work (3); 303 Field Work in Public Health (8); 402 Seminar in Health (3). Three health elective courses (chosen from .208, .104, .204, .451, .403, .485, .209, .001, .002, .003, .004, .005).

Required in Related Subjects (26 hrs.): Fundamentals of Biology (4); General Chemistry (4); Human Anatomy & Physiology I & II (8); General Psychology (3); General Sociology (3); Microbiology (4).

Note: Health Education majors presently prepare only for secondary certification. However, they do take "Survey of Education Programs" in lieu of "Principles of Secondary Education." Also, they take 8 semester hours of student teaching instead of 10. (An additional 8 hours of "Field Work" is taken as part of the major).

History

Required in Major (36 hrs.): History of the United States 145-146 (6); History of Western Civilization 262, 263, or 264 (choice of 2 semesters) (6); Choice of 40.290 Introduction to Historical Study or 40.490 Interpretive Problems in History or 40.498 Philosophy of History (3); A course from African, Asian or Latin American fields (3); plus 18 additional hours elected from offerings of the department (12 hours must be upper division).

Mathematics

Required in Major (30 hrs.): 261 Fundamentals of Math (3); 273 Calculus I Differential (4); 274 Calculus II Integral (4); 353 Elementary Geometry from an Advanced Standpoint (3); 361 Algebraic Structures (3); Electives in Mathematics (12).

Required in Related Subjects (8 hrs.): General Physics I & II (8).

Physics

Required in Major (28 hrs.): 221-222 or 211-212 General Physics (8); 301 Mechanics or 305 Electricity and Magnetism (4); 302 Thermodynamics & Kinetic Theory or 321 Introductory Mathematical Physics (3); 311 Modern Physics (4); 385, 386, 387 Advanced Physics Laboratory (any 6); 313 History & Philosophy of Physics (2); 401 Physics Seminar (1).

Required in Related Subjects (16 hrs.): Fundamentals of Biology or General Chemistry (any 8); Calculus I (4); Calculus II (4).

Social Science

Required in Major (54 hrs.): 262 Western Civilization I, 263 Western Civilization II, or 264 Western Civilization III (any two of these three courses for 6 credits); U.S. History I (3); U.S. History II (3); Elements of Geography I (3); Elements of Geography II (3); Courses in Political Science (6); Courses in Sociology (6); Courses in Economics (6); plus 18 hours of Upper Division courses of which 6 hours must be in history (due to certification requirements) and 12 hours in any, and/or all five Social Science Departments.

Sociology

Required in Major (30 hrs.): 101 Introduction to Sociology (3); 407 Social Theory (3); 111 Behavioral Statistics (3); 495 Research Methods (3); plus 18 semester hours of electives from offerings of the department.

Spanish

Required in Major (27 semester hours beyond the Intermediate [2nd year] Level of the Language): 321-322 Survey of Spanish Literature I & II (6); 301-302 Advanced Conversation & Composition I & II (6); 391 Advanced Grammar (3); plus 12 additional semester hours of electives in the major.

Speech-Drama

Required in Major (36 hrs.): 131 Fundamentals of Speech Communication (3); 106 Voice and Diction (3); 203 Advanced Public Speaking (3); 103 Introduction to the Theater (2); 310 Phonetics of American English (3); 221 Acting I (Oral Interpretation of Literature) (3); 211 Play Production (4); plus 15 semester hours of specified electives from departmental offerings. Speech and Drama Secondary majors are *very strongly* urged to complete 26 hours of English courses.

Dual Certification

The following majors are recognized only for dual certification (both elementary and secondary), and students must prepare to teach K-12. They must complete

the general course requirements of the college, the requirements of the major department, and the following Teacher Education courses: Educational Psychology (Prerequisite: General Psychology); Survey of Educational Programs 27.319 prerequisite 70.201 (in lieu of "Principles of Secondary Education"); Methods of teaching major subject in Elementary School; Methods of teaching major subject in Secondary School; Student teaching in Elementary School; Student teaching in Secondary School; Foundations of Education 29.401 (prerequisite: student teaching).

Art Education

Required in Major (41 hrs. now [under revision]): 103 Two Dimensional Design (2); 111 Drawing & Appreciation of Drawing I (2); 104 3-D Design (2); 121 History of Art-Ancient Renaissance (3); 122 History of Art-Baroque-Modern (3); 202 Design, Advanced (2); 329 Oil Painting & Related Media (3); 330 Watercolor & Related Media (3); 231 Ceramics (3); 240 or 241 Sculpture (3); 225 Advertising Design (2).

Plus at least one of the following: 12.347 Screen Process, 12.349 Relief Process, 12.449 Intaglio Process, or 12.451 Lithographic Process (3).

Plus 10 additional hours — from departmental offerings, preferably in an area of specialization. (Electives also permitted in Stage Design, Photography, Films) (10). In addition to the Teacher Education courses, 12.455 "Proseminar in Teaching of Art" is required.

Music

Required in Major (Instrumental Music 63; Vocal and General Music 63): Music Theory and Laboratory (16); Music Organizations (7); Piano Class (2); Voice Class (1); Brass Class* (2); String Class* (2); Percussion Class* (2); Woodwind Class* (2); History of Music I & II (6); Choral and Instrumental Arranging (3); Conducting (Either Instrumental or Choral) as case may be (3); Form and Analysis (3); Private Lessons (7); General Music (3).

In addition, the following course is required which could be considered part of the professional courses. Organization and Administration of Music Education (3).

*Note: Vocal majors take these classes for one semester hour only. In lieu of this they must elect 3 additional hours, and take Voice Class for only 2 semester hours instead of 1.

Physical Education

Required in Major (45 hrs.): 103 First Aid (1); 199 Overview of Physical Education (2); 203 Curriculum in Physical Education (3); 311 Kinesiology (3); 313 Physiology of Exercise (2); 303 Organization and Administration of P.E. (3); 309 Test and Measurements (P.E.) (3); 401-402 Principles & Problems of Physical Ed. I & II (4); 321-322 Coaching and Officiating I & II 62 (Women) (Required for men majors, elective for Women) (2); 423 Adaptive Physical Education (Required for women majors, elective for men) (2); 201 School Health Programs (3); 101 Current Health Problems (3); 315 Care & Prevention of Athletic Injuries (Required for men, elective for women) (2); plus 12 hours of laboratory skills, 9 of which are specified.

Required in Related Subjects (16 hrs.): 101 General Biology (4); 101 Physical Science (4); 113-114 Human Anatomy & Physiology I & II (8); 50.201 Elements of Mathematics is elective but recommended.

Master of Education in Secondary Education

For detailed information regarding the Master of Education in Secondary Education see the Bulletin of Graduate Studies.

UNDERGRADUATE COURSES IN SECONDARY EDUCATION

- 27.001 SLOW LEARNER IN THE SECONDARY SCHOOL (3) Revision and development of curriculum and instruction to meet needs of the slow learner. Emphasis upon individualization. Prerequisites: Ed. Psychology, and either Principles of Sec. Ed. or Survey of Ed. Programs, student teaching, or teaching experience, or consent of instructor.
- 27.007 DEVELOPMENTAL READING FOR THE EARLY ADOLESCENT (3) Teaching methods specifically for the development of comprehension, study and word recognition skills for the middle school or junior high school student. Prerequisites: Teaching Reading in the Sec. Sch., or Teaching Reading in the Elementary Sch. (G)
- 27.319 SURVEY OF EDUCATIONAL PROGRAMS (3) Survey of educational programs and services K-12. Combines theoretical aspects of (26.361), Elementary Curriculum I and (27.341) Principles of Secondary Education. Open only to those students in art, music, physical education, speech pathology, and health, whose majors lead directly to certification in elementary and secondary education. Prerequisite: Junior standing, Educational Psychology (70.201) and consent of instructor, the chairman of student's major department and the chairman of secondary education.
- 27.341 PRINCIPLES OF SECONDARY EDUCATION (3) Philosophy and purpose of secondary education; nature of secondary education programs; principles of teaching and learning; basic techniques in instruction. Prerequisite: Junior standing, Educational Psychology 70.201 and permission of chairman of Secondary Education. Field experience required. To be taken the semester prior to student teaching.
- 27.353 TEACHING MODERN FOREIGN LANGUAGE IN THE SECONDARY SCHOOLS (3) Aims and purposes of foreign language instruction; current curricular trends, including the importance of modern language teaching practices. Open to Juniors or seniors, who plan to teach foreign language, with consent of instructor. Prerequisite: 27.341.
- 27.355 TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL (3) Objectives, curriculum, materials and instructional procedures in the teaching of social studies, history, geography, government, political science. Open to students in the student teaching block and others with equivalent backgrounds and objectives. Prerequisite: 27.341.
- 27.357 TEACHING ENGLISH IN THE SECONDARY SCHOOL (3) Language Arts as taught in secondary schools. Open to students in the student teaching block and to others with equivalent backgrounds and objectives with consent of the instructor. Prerequisite: 27.341
- 27.358 TEACHING COMPOSITION IN THE SECONDARY SCHOOL (3) This course includes: grammar vocabularies, motivational techniques, evaluation, student publications, varieties of purposes for writing, oral composition, laboratory experiences and individual problem analysis. Prerequisite: 27.357 (30.379) or consent of instructor. (G)
- 27.359 CONTEMPORARY MATERIALS FOR TEACHING ENGLISH IN SECONDARY SCHOOLS (3) Application of new materials designed for teaching the language arts in the secondary school including records, films, SRA materials, programmed learning, and television. Prerequisite: 27.357 or consent of instructor. (G)
- 27.360 TEACHING READING IN THE SECONDARY SCHOOL (3) General developmental reading skills; identification, diagnosis and remediation of reading problems; comprehension, vocabulary building, work-study skills. (G)
- 84.379 TEACHING SPEECH AND DRAMA IN THE SECONDARY SCHOOL (see Communications Dept. Listings).
- 50.423 (50.379) TEACHING MATHEMATICS IN THE SECONDARY SCHOOL (3) Aims and purposes of mathematics instruction; examination of courses of study and textbooks; study of conceptual approaches. Open to students in the teaching block. Prerequisite: Math 50.353 and 50.361. Open to other students with equivalent backgrounds and objectives with the consent of the Mathematics Department.
- 50.429 READINGS IN MATHEMATICS EDUCATION FOR THE SECONDARY SCHOOL TEACHER (see Math Dept. Listings).
- 54.309 METHODS OF TEACHING CHORAL AND GENERAL MUSIC IN SECONDARY SCHOOL (See Music Dept. Listings).
- 54.308 METHODS OF TEACHING INSTRUMENTAL MUSIC—ELEMENTARY, SECONDARY (See Music Dept. Listings).
- 12.479 (379) TEACHING ART IN THE SECONDARY SCHOOL (2) (See Art Dept. Listings).
- 61.325 (61.325) TEACHING PHYSICAL EDUCATION IN THE SECONDARY SCHOOL (2) Methods of teaching sports, track, and field, stunts, combatives, rhythms, relays, and mass games. Open only to Physical Education majors and other interested students in the student teaching block.
- 76.001 FIELD COURSE IN SECONDARY SCIENCE TEACHING METHODS (2) Analysis and evaluation of current materials and techniques in secondary science teaching. To be taken concurrently with student teaching at off-campus center.

(G) May be available for graduate credit. See Graduate Bulletin.

- 76.379 (76.379) **TEACHING SCIENCE IN THE SECONDARY SCHOOL (2)** Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials. Open only to students in the student teaching block.
- 76.380 **TEACHING SCIENCE IN THE SECONDARY SCHOOL (3)** Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials. Open only to Special Professional Program Students, or to those completing work in Summer and Evening classes.
- 27.398 (26.398) **STUDENT TEACHING IN SECONDARY SCHOOL (6-14)** Practical experience in observation, participation, and student teaching in public school situation. Prerequisite: 27.341 or 27.319 and appropriate methods course. Student Teaching is offered in the following subject areas:
- | | |
|--|-----------|
| 27.398 (26.398) Art | (6) |
| 27.398 (26.398) English | (10) |
| 27.398 (26.398) Speech and Dramatics | (10) |
| 27.398 (26.398) Mathematics | (10) |
| 27.398 (26.398) French | (10) |
| 27.398 (26.398) German | (10) |
| 27.398 Health | (8 or 14) |
| 27.398 (26.398) Music | (6) |
| 27.398 (26.398) Physical Education | (7) |
| 27.398 (26.398) Biology | (10) |
| 27.398 (26.398) Secondary School Science | (10) |
| 27.398 (26.398) Social Studies | (10) |
| 27.398 (26.398) Spanish | (10) |
- 27.399 **DIFFERENTIATED STUDENT TEACHING—SECONDARY (1-8)** Student teaching experiences in addition to those in 27.398 or student teaching in special subject areas, according to needs and interests of the student. Prerequisite: Consent of the student's area director.
- 27.421 (441) **THE JUNIOR HIGH SCHOOL (3)** Principles, purposes, functions, and characteristics of the Junior High School, with emphasis upon its organization and curriculum. Prerequisite: 26.361 or 27.319 or 27.341. (G)
- 27.423 (443) **THE MIDDLE SCHOOL (3)** Functions and characteristics of the middle school; emphasis on nature of transcendent youth (ages 10-14), curriculum, and organizational patterns. Prerequisite: 26.361, or 26.462, or 27.319, or 27.341. (G)
- 27.425 (445) **TEACHING IN THE MIDDLE SCHOOL (3)** Instruction in the methods, required for teaching in the middle school. An individualized program of instruction, readings, observations and teaching experiences will be planned for each student. Prerequisite: Teacher experience, student teaching, or concurrent with student teaching. (G)
- 27.461 **TEACHING READING IN THE SECONDARY CONTENT AREAS (3)** Teaching reading study skills leading to reading efficiency and problem solving associated with specific subject matter content. Prerequisites: Teaching Reading in the Secondary School. (G)
- 27.494 **TRAVEL AND STUDY IN SECONDARY EDUCATION (1-6).** Study abroad of educational facilities, programs or practices, or selected projects in education topics. By special arrangement with program chairman and sponsoring instructors.
- 27.495 **INDEPENDENT STUDY IN SECONDARY EDUCATION: (project to be named) (1-4)** An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Consent of Chairman of Secondary Education.
- 27.496 **DIRECTED READINGS IN SECONDARY EDUCATION (1-4)** Independent reading in selected areas of Secondary Education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the Department to major students. Obtain consent of chairman of Secondary Education.

Graduate Only

- 27.641 **CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL (3)** Principles and philosophies of curriculum development; objectives, practices and evaluation trends; the teacher's role. Prerequisite: Consent of instructor.
- 27.643 **THE ADMINISTRATION OF THE SECONDARY SCHOOL (3)** Analysis of principles of school administration, the administrator's roles and responsibilities, human relations and personnel management, public relations, management of the school unit and curriculum. Prerequisite: Three years teaching experience, teacher certification and nine hours of graduate credit.
- 27.647 **THE TEACHING PROCESS: SECONDARY EDUCATION (3)** Study of recent theories, methods, and findings in research on the teaching process. Analysis of teaching behaviors and exploration of teaching strategies in educational programs for Secondary students. Prerequisite: Teaching experience, either Psyc. 70.511 or Educ. 29.501, and consent of Education Graduate Coordinator. One semester per year, day or/and evening and Summer.
- 27.679 **SEMINAR IN SECONDARY SCHOOL SOCIAL STUDIES (3)** A seminar approach to current research, trends, practices, issues, content, materials, and problems in the teaching of contemporary secondary school social studies. Individual reading and re-
- (G) May be available for graduate credit. See Graduate Bulletin.

search will be pursued on selected topics culminating in a seminar paper. Prerequisite: Consent of instructor, or prior teaching experience in social studies.

- 27.681 SEMINAR IN SECONDARY EDUCATION (3) Scholarly investigation of selected aspects of secondary education with emphasis on classroom application. A paper involving description and evaluation of the investigation will be required. Prerequisite: Twenty-

four hours of graduate work including 29.691.

- 27.683 SEMINAR IN SECONDARY SUPERVISION (3) Role of the supervisor: supervisory practices and techniques. Students may concentrate in areas related to their professional interests. Prerequisite: Nine hours of graduate work in the field of education including 28.691.

- 27.699 MASTERS THESIS IN SECONDARY EDUCATION

COURSES IN ADULT EDUCATION

- 27.485 ADULT EDUCATION (3) Introduction to the historical and philosophical evolution of adult education in the United States in relationship to current aims, types of programs, and issues. Prerequisite: Consent of instructor.

- 27.497 TEACHING THE ADULT LEARNER (3) Teaching-learning activities at various levels of adult education. The needs, motivation,

and abilities of the adult learner are stressed. Prerequisite: Consent of instructor.

- 27.489 PRINCIPLES OF READING INSTRUCTION FOR ADULTS (3) Causes of adult reading disabilities, evaluation relevant to reading disability, and the methods and materials employed in the remediation process. Prerequisite: Consent of instructor.

General Studies in Education Major

The Major in General Studies in Education permits highly individualized programs or thematic options described in terms of the students' recognized needs and the requirements of positions for which they hope to prepare. (Eg., one such emphasis has been developed in Library Media Education.) Inquiries should be made to the Director of Professional Programs, Division of Education. The following guidelines must be followed:

A. The student must achieve a 2.0+ C.P.A. and must declare the major by submitting a plan of study no later than the first semester of the junior year. This plan of study must be approved by the student's Education advisor and the Associate Dean of Education.

B. The student must satisfy the General Education Requirements of the College (38-45 hrs.) and a minimum of 128 hrs. for graduation.

C. The student must complete 40 or more additional hours in liberal Arts and Sciences courses from Art, Biology, Chemistry, English, Geography, Health, History, Modern Languages, Mathematics, Music, Philosophy, Physics, Psychology, Sociology, or Theatre. These hours must include work from a minimum of four different departments and be approximately balanced between the arts and the sciences (physical or social). A rationale for the selection of these courses must be followed.

D. The student must also include in his program a professional component of approved professional courses planned to prepare him for a specialty. This component must be designed with appropriate competencies in an area of expertise chosen by the student. This part of his program must consist of at least 80% upper-division courses and center around a "core" specialty which leads to professional certification or expertise in an Education-related occupation.

Special Certification Programs

Programs leading to State certification for Safety and Driver Education instructors, School Librarians, Urban teachers, and Speech and Hearing Clinicians for the schools.

Safety and Driver Education Program

Requirements for a Minor in Safety and Driver Education

General requirements: (1) A bachelor's degree and (2) A teaching certificate

with a teaching major; or (1) Complete the General Education Requirements, (2) Develop a major and meet certification requirements in the major, and (3) Complete the following as elective courses: Educational Psychology; Principles of Secondary Education; Audio-Visual Laboratory or Methods and Materials in New Educational Media; and First Aid (Standard or Advanced Red Cross Certificate).

Specific requirements: (1) Complete 15 credit of required Safety and Driver Education courses: 28.430, 28.431, 28.432, 28.433, and 28.434 and (2) Complete 9 credits of Safety, Driver Education or Transportation courses as electives.

28.430 (26.471) PRINCIPLES OF ACCIDENT PREVENTION (3) Includes a survey of the history and philosophy of the safety education movement, need for safety education, aims and objectives, accident causation and prevention, and the role of education in eliminating environmental hazards and reducing avoidable human error. (G)

28.431 (26.472) HIGHWAY TRANSPORTATION SYSTEM AND DRIVER TASK ANALYSIS (3) History and philosophy of automobile and highway safety engineering, U.S. and International traffic controls, traffic laws and regulations, critical analysis of traffic accidents and causation, and attitude factors. (May be taken concurrently with 28.432.) (G)

28.432 (26.473) METHODS OF TEACHING IN DRIVER EDUCATION AND SAFETY (3) Specialized techniques for safety and driving instruction, including A-V aids, psycho-physical testing and evaluation, programmed instruction, multiple-car facility, on-street instruction, detonator demonstration and applications. (May be taken concurrently with 28.431.) (G)

28.433 (26.494) MULTIPLE CAR FACILITIES AND ON-STREET INSTRUCTION IN DRIVER EDUCATION (3) Supervised student teaching in Driver Education, including classroom and in-car, and utilization and planning for multiple-car facility. (May be taken concurrently with 28.434.) Prerequisite: 28.431 and 28.432; Maryland license and 3 years driving experience with good record. (G)

28.434 (26.494) FIXED BASE SIMULATION AND ON-STREET INSTRUCTION IN DRIVER EDUCATION (3) Supervised student teaching using driving simulators. Theory, mechanics, techniques, utilization and evaluation of driving simulators. (May be taken concurrently with 28.433.) Prerequisite: 28.431 and 28.432; Maryland license and 3 years driving experience with good record. (G)

28.435 PROGRAMMED INSTRUCTION FOR DRIVER EDUCATION (3) Philosophies and principles of programmed instruction. Analysis and evaluation of commercial programs and teacher-made programs; current research and trends. Programing project is required with direct application through instructional utilization. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)

28.436 MULTI-MEDIA TECHNIQUES FOR DRIVER EDUCATION (3) A laboratory approach to the planning and utilization of multi-media instruction. Principles and theory of multi-media communications; survey of literature and current trends. A project is required in the design, production and field testing of an instructional package. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)

28.437 AUTO MECHANICS FOR DRIVING INSTRUCTORS (2) Acquaints students with mechanics of automobile to enable him to better teach this area and "trouble-shoot" in minor mechanical emergencies. Laboratory approach utilized. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)

28.438 (26.475) CONCEPTUAL MODELS IN ACCIDENT CAUSATION (3) Treatment of the driver-behavior problem in its relation to many of the psycho-physical factors and forces in the traffic environment that impinge upon the man behind the wheel. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)

28.439 (26.478) BASIC PUPIL TRANSPORTATION (3) Consideration of organization and administration of state, county, and district pupil transportation service with emphasis on safety and economy. Selection and training of drivers, route planning, maintenance mechanics, bus specifications and procurement are included. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director (G)

28.440 (26.484) ADVANCED PUPIL TRANSPORTATION (3) Consideration of the problems of school bus transportation, solutions employed, and a review of research and techniques in this field. Workshop approach utilized. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)

28.441 (26.474) ADMINISTRATION AND SUPERVISION OF SAFETY EDUCATION (3) Background and experience in administration and supervision of Safety education programs, K-12. Methods, techniques, materials, program planning, records and reports finan-

(G) May be available for graduate credit.

- cing and Insurance. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)
- 28.442 (28.436) ADMINISTRATION AND SUPERVISION OF DRIVER EDUCATION (3) Background and experience in administration and supervision of Driver Education programs. Methods of organization, techniques, materials, program planning, records and reports, financing and insurance, procurement, personnel selection, planning classroom and in-car laboratory experiences are included. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)
- 28.443 (26.476) PROBLEMS IN SAFETY AND DRIVER EDUCATION (3) Consideration of the individual problems encountered in the teaching of driver and safety education. The psychology of teaching and learning are emphasized and consideration is given to the implications of emotional and attitudinal factors in driver and traffic education. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)
- 28.444 (26.477) FIELD STUDIES IN SAFETY AND DRIVER EDUCATION (1-4) Designed to meet the needs of persons in the field with respect to research projects in special areas. Includes examination of existing courses of study, current trends current research, evaluation, supervision, and techniques. Students will be expected to carry out a special field project in their area of interest. "May be taken more than once, but not to accumulate more than 4 credits." Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director. (G)
- 28.445, 446 CURRICULUM DEVELOPMENT IN SAFETY AND DRIVER EDUCATION (3, 3) History of curriculum development in safety and driver education; principles; philosophies; objectives; current practices; evaluation techniques; laboratory experience; and field study. Prerequisite: 15 credits in approved Safety and Driver Education Courses and/or approval of Director. (G)

Library Media Education Programs

Certification standards are changing. These possibilities are being developed and subject to confirmation:

1. *"Minor" Program:* State certification for the position of school librarian (Education Media Associate Level I) may be obtained by completing one of the majors in teacher education plus an additional eighteen semester hours of Library Media Education as a "minor" elective.

28.255; 28.355; 28.357; 28.359; either 28.455, or 28.457; and 28.459.

2. *Major Program:* The General Studies in Education Major provides for a thematic option in Library Media Education which is designed to prepare students for certification as school librarian (Education Media Associate Level I). Students interested should consult the Coordinator of General Studies Programs or inquire in Division of Education.

3. *Graduate Study:* Students who have bachelor's degree and wish to prepare for an advanced certification in school librarianship (Education Media Specialist, Level II) should consult the Education Coordinator in the graduate office.

28.255 (26.255) BACKGROUNDS OF SCHOOL LIBRARIANSHIP (3) History of libraries, role of books and communications media in our culture today, objectives of all types of libraries; literature of librarianship; professional associations, principles and philosophy of librarianship.

28.359 (26.359) INSTRUCTIONAL MATERIALS FOR SCHOOL LIBRARIANS (3) Learning materials, K-12, with emphasis on the factual, on multi-media in curriculum areas as social studies, science, language arts, mathematics, etc.

28.451 (26.355) REFERENCE MATERIALS FOR SCHOOL LIBRARIANS (3) Introduction to general and subject bibliographies and indexes, trade and national bibliographies, general reference tools, encyclopedias and dictionaries. (G)

28.453 (26.357) ORGANIZATION OF MEDIA CENTERS FOR SCHOOL LIBRARIANS (3)

Principles of bibliographic control, use of printed catalog cards, and commercial processing services, introduction to book catalogs, and methods of controlling non-print media. (G)

28.455 (26.455) CHILDREN'S LITERATURE FOR SCHOOL LIBRARIANS (3) Emphasizing the multi-media approach this would introduce the student to the wealth of imaginative literature in print, on recordings, on film, etc. available for children K-6. (G)

28.456 STORYTELLING (3) The selection and presentation of stories for children. A study of sources for the storyteller in folklore, myth, legend, poetry, and writings of storytellers. Development of skills in storytelling. Prerequisites: Children's Literature or Children's Literature for School Librarians, or consent of instructor.

(G) May be available for graduate credit.

28.457 (26.457) YOUNG ADULT LITERATURE FOR SCHOOL LIBRARIANS (3) Covers fiction, biography, travel—a wide range of recreational and imaginative materials for young people in their teens including means of introducing the materials to young people. (G)

28.459 (26.459) ADMINISTRATION AND SERVICES OF MEDIA CENTERS FOR SCHOOL LIBRARIANS (3) Culminating course. Emphasis on evaluation of the community and services of media center. Analysis of student and faculty, community and range of services—reading guidance, reference and instructional services. (G)

Urban Education Program

Project Mission is a program designed to train teachers to teach in the inner city schools. Towson, Morgan and Coppin State Colleges have joined with the Baltimore City Public Schools in offering this specialized training. The curriculum is offered in an inner city school in Baltimore City with one half of the day spent in the classroom with a master teacher. The other half of a day is spent in the same schools with the project professors from the three colleges. Currently, new students are not being admitted.

28.371-372 PSYCHOLOGICAL FOUNDATIONS (1, 2) Psychological understanding needed for guiding the learning of disadvantaged children and youth. The values, attitudes, and aspirations as well as the cognitive learning style of disadvantaged students. (G)

28.373-374 SOCIOLOGICAL FOUNDATIONS OF URBAN EDUCATION (1, 2) Introduction to concepts and principles related to the social foundation in an urban environment. Planned to help students to relate themselves positively and functionally to the social aspects of education and to integrate these into their professional skills and attitudes. (G)

28.375-376 URBAN FIELD EXPERIENCES (2, 2) This course provides first hand experiences relating theory and practice in Psychological and Sociological Foundations and Communications Skills. (G)

28.377-378 COMMUNICATION SKILLS (1, 2) Speech, semantics, linguistics and sentence structure, a communication model, and psychological aspects of communication. (G)

28.381-382 METHODS AND MATERIALS IN ELEMENTARY EDUCATION (3, 3) Focus on reading, diagnosis of disabilities, special concerns for the disadvantaged child, remediation techniques. Pedagogy, planning and organizing, presentation, evaluation, use of realia, and teaching the language arts. (G)

28.383-384 METHODS AND MATERIALS IN SOCIAL STUDIES IN THE SECONDARY SCHOOLS (3, 3) Teaching social studies at

the junior high level to disadvantaged youth. In addition, attention is given to such topics as: the curricular organization of social studies, developing social studies skills, instructional planning, social studies materials and resources, and evaluation in the social studies. (G)

28.385-386 METHODS AND MATERIALS—ENGLISH (3, 3) Methods and materials which may be used in directing the language and literary experiences of disadvantaged adolescents. Emphasis is placed on creativity and imagination in developing new approaches to meeting the classroom needs of the disadvantaged. The course gives particular attention to techniques for developing skills in reading and oral communication. (G)

28.471-472 PROBLEMS IN INSTRUCTIONAL AID AND RESOURCES (2, 2) Opportunities will be provided for the student to become acquainted with all types of instructional materials. As new instructional aids become available, students will examine and evaluate their usefulness in the instructional programs of educationally deprived children. In addition, resource personnel of the Baltimore City Department of Education, the cooperating colleges, and the community will be brought in to discuss their contributions to the improvement of the school programs of the disadvantaged child. Because of the nature of the course no credit is being offered. (G)

28.477-478 INTERNSHIP IN TEACHING (6, 6)

Graduate Only

28.571-572 (28.501) TEACHING THE DISADVANTAGED CHILD (3) Concern will be given to planning, organizing, and providing of appropriate curriculum experiences for pupils in urban schools. Emphasis will be placed on those methods and materials which are especially appropriate to meeting the needs of children attending schools in disadvantaged communities.

28.575 (28.515) BACKGROUNDS IN URBAN EDUCATION (3) This course aims to acquaint teachers with sociological factors, family organization and disorganization, and edu-

cational deprivation of children living in a crowded and urbanized society. Attention will be given to the special learning styles of these pupils.

28.577 (28.571) SEMINAR IN URBAN EDUCATION (3) This course is designed as an advanced course for those who have had previous courses in this field and who are engaged in working with children who are educationally disadvantaged. It will focus on anthropological, ecological and psychological research related to the problems of the disadvantaged learner.

Special Education Courses

28.481 METHODS OF TEACHING THE VISUAL HANDICAPPED (3) Instructional techniques, materials and resources used in teaching the visually handicapped. Include Braille materials. Prerequisites: 70.101 and 70.201.

28.483 BRAILLE READING AND WRITING (3) Reading and writing of braille. Additional individual project required of students taking course for graduate credit. Prerequisites: 70.101, 70.201 and consent of instructor.

Speech Pathology and Audiology

A program to meet certification requirements as a speech and hearing clinician in the Public Schools is offered by the Speech Department. A major (B.S.) consists of a minimum of 36 credits from the major field plus 18 credits from related subjects.

Courses Required in Major Subjects are: 87.105 Speech and Language Development; 87.302, 304,306 Speech Pathology I & II & III; 87.241 Introduction to Audiology; 84.310 Phonetics of American English; 84.402 Speech Science; 87.487 Clinical Practice in Speech Correction; 87.488 Clinical Practice in the Public Schools; and 87.305 Stuttering: Etiology and Therapy.

At least six semester hours must be selected from the following: 84.106 Voice and Diction; 84.213 General Semantics; 87.401 Clinical Audiology; 87.407 Speech Reading and Auditory Rehabilitation; 87.489 Clinical Counseling in Audiology and Speech Pathology; and 87.404 Professional Program, Problems, and Relationships.

Courses in Related Subjects must total at least 18 semester hours in psychology and education courses. The education courses selected are limited to 9 hours and must include either "Foundations of Education" or "Survey of Educational Programs."

OTHER EDUCATION COURSES

(Courses available to students in more than one Education Program)

29.006 (28.006) INTRODUCTION TO CAREER DEVELOPMENT: THEORY AND PRACTICES (3) Resources, methods, and recent trends in career development school programs (K-12). Prerequisite: Student teaching or teaching experience, or equivalent experience in school programs. Bachelor's degree or equivalent for graduate credit.

29.007 (28.007) PRACTICUM IN TUTORING READING (1) Off-campus tutoring in reading of elementary school pupils. Tutors will receive instruction in the teaching of basic word recognition skills and will tutor individuals or small groups. Course may be repeated for additional credit. (Not to exceed three credits) Prerequisite: None.

29.008 APPLIED LEARNING THEORY (3) Practical application of pupil-oriented techniques derived from a broad range of current psychological theory. Laboratory practice of strategies for motivation, reinforcement, behavior modification, interactive processes, improving self-perception. Prerequisites: Educational Psychology, and either Principles of Secondary Education or Survey of Educational Programs.

29.101 (27.101) CAREERS IN EDUCATION (2) Guided field experiences, designed to help students expand their knowledge of careers

in education as a basis for choosing a major emphasis. Examination of careers in education and the scope of education in a democracy.

29.301 (27.301) HISTORY OF EDUCATION (3) Major developments, personalities, and movements in the evolution of education. (G)

29.315 (28.315) EDUCATIONAL MEASUREMENT FOR CLASSROOM TEACHERS (2) Problems in measurement; principles underlying choice of test instruments; survey of test literature; dealing with test data; constellation and interpretation of tests.

29.325 (28.325) FIELD EXPERIENCES: EDUCATION IN INFORMAL SETTINGS (1-3) Studying and/or working with children in non-classroom settings such as camps, recreational centers, or field trips. Individual plans of study and evaluation will be developed with the instructor. Prerequisite: Consent of Instructor.

29.401 (27.401) FOUNDATIONS OF EDUCATION (2-3) Sociological, philosophical, psychological and historical foundations of western education. Perspective in these areas as they relate to current educational issues and practices. Prerequisite: Student teaching and consent of Chairman, Department of Secondary Education. (G)

- 29.403 (27.403) **COMPARATIVE EDUCATION (3)**
A study of patterns of education in different cultural setting with implications for the student of American education. Emphasis on cross-cultural, political, economic and social aspects of education. Prerequisite: Foundations of Education or equivalent. (G)
- 29.405 (27.405) **PHILOSOPHY OF EDUCATION (3)**
Philosophic dimensions of the teaching learning process, as discriminated and discussed by major philosophers and educational philosophers. (G)
- 29.406 (28.405) **RECENT TRENDS IN TEACHING (3)**
Emerging concepts of teaching and organization for instruction. Prerequisite: Student teaching or senior standing with consent of instructor. (G)
- 29.407 (27.407) **CONTEMPORARY ISSUES IN EDUCATION (3)**
Seminar approach to current issues in education. Prerequisite: Student teaching or senior standing with consent of instructor. (G)
- 54.408 **ORGANIZATION AND ADMINISTRATION OF MUSIC EDUCATION** (See Music Department Listings.)
- 29.409 (28.409) **FIELD STUDIES OF THE CHILD AND HIS COMMUNITY (2)**
Planning and working with groups of children in approved social agencies or making extensive studies of recreational and non-recreational social agencies. Class discussions and field trips.
- 29.414 (28.403) **EDUCATIONAL TESTS AND MEASUREMENTS (3)**
Problems in measurement; principles underlying choice of test instruments, survey of test literature; dealing with test data; constellation and interpretation of tests. Not open to those who have had EDUC 28.315 or 29.315.
- 29.415 (28.415) **EDUCATIONAL STATISTICS (3)**
Designed as a practical course in statistics for the student in education. Emphasis on educational applications of descriptive statistics, including central tendency, variability, and association. Prerequisite: 50.204, 50.205, or equivalent.
- 29.417 (28.417) **CHILDREN'S LITERATURE (3)**
Examination of children's books; study of content and form. (G)
- 29.418 (26.418) **LITERATURE FOR THE ADOLESCENT (3)**
Examination of literature as an expression of basic needs and ideas of youth: studying criteria for selection; evaluating in terms of forces affecting society and the adolescent. (G)
- 29.425 (26.425) **CORRECTIVE READING (3-6)**
The psychology of reading; methods, principles, techniques, and materials for the classroom teacher in meeting typical learning patterns. Experience in a laboratory center for disadvantaged youth for the development of skill in analysis and correction of reading disabilities. In evening school, experience in the laboratory center is replaced by tutoring a child. Prerequisite: Student teaching or 26.427 or 26.429, or consent of instructor. (G)
- 29.431 **THE SCHOOL CURRICULUM (3)**
An examination of curriculum patterns and practices; includes sociological, philosophical and psychological factors which shape the curriculum. Prerequisites: Student teaching or professional experience in education. (G)
- 29.433 **THE NON-GRADED CURRICULUM (3)**
Study and analysis of the non-graded approach to curriculum organization: focus on rationale, principles and models of continuous-progress curricular programs in elementary and secondary schools. Prerequisites: Student teaching or professional experience in education. (G)
- 29.445 **HUMAN RELATIONS INSTITUTE ON INTERGROUP EDUCATION I: THE INDIVIDUAL (3)**
Consideration will be given to: understanding one's self, the nature of prejudice, and environmental factors which influence minority groups and cultures, and relationship of these factors to the development of meaningful educational programs. Prerequisite: For undergraduates: student teaching, and at least one course each in sociology and psychology. For graduates: teaching experience, or certification. (G)
- 29.446 **HUMAN RELATIONS INSTITUTE ON INTERGROUP EDUCATION II: THE COMMUNITY (3)**
Consideration of political, economic, social, and educational factors as they affect minority cultures and implications for school and college programs. Prerequisite: For undergraduates: student teaching and at least one course each in sociology and psychology. For graduates: teaching experience or certification. (G)
- 29.449 **CITIZENSHIP EDUCATION IN THE SCHOOL (3)**
The development and implementation of activities for citizenship education in the school: philosophy, concepts, principles, techniques and resources for teacher and administrator. Prerequisite: Teaching experience, 27.401, and 78.375 or equivalents, consent of instructor. (G)
- 29.451 (28.401) **GUIDANCE IN THE PUBLIC SCHOOL (2-3)**
Scope and function of a guidance program; the role of the classroom teacher in guidance. (G)
- 29.461 (28.461) **LANGUAGE AND THE URBAN CHILD (3)**
Language theory in reference to psychological, sociological, and cultural effects in the classroom will be studied. Special emphasis will be given to the analysis of dialects and "standard" and "non-standard" speech patterns as well as practical classroom applications. Prerequisite: Teaching or student teaching experience — or consent of instructor.

(G) May be available for graduate credit. See Graduate Bulletin.

29.467 (28.467) TEAM TEACHING WORKSHOP
(3) Conducted to assist teachers who are actively engaged in team teaching or will be participating as members of a team in the future. (G)

29.471 SUPERVISORY PRACTICES IN TEACHER EDUCATION (3) Experiences and study in developing particular skills and competencies for supervising quality laboratory/field experiences. Content is designed for supervising teachers, team leaders, and resource personnel. Prerequisite: Teaching experience. Graduates count this as a workshop elective. (G)

76.488 (26.488) AEROSPACE EDUCATION-WORSHOP (3) In cooperation with CAP, USAF, NASA and others. For elementary and secondary school teachers, supervisors, and administrators. A fund of general knowledge about aviation and space exploration, their impacts, and the development of resources for uses in teaching. Field trips, two of which

may extend all day. Air and ground transportation by the college and cooperating agencies. (G)

29.494 TRAVEL AND STUDY EDUCATION; (PROJECT TO BE NAMED) (1-6) Study abroad of educational facilities, programs or practices, or selected projects in educational topics. By special arrangement with program chairman and sponsoring instructors.

29.495 INDEPENDENT STUDY IN EDUCATION: (PROJECT TO BE NAMED) (1-4) An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: consent of program chairman.

29.496 DIRECTED READINGS IN EDUCATION (1-4) Independent reading in selected areas of Education, in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the Department to major students.

Graduate Only

12.595 RESEARCH IN ART AND ART EDUCATION (3) (See Art Dept. Listings.) (G)

12.697 SEMINAR IN ART EDUCATION (3) (See Art Dept. Listings.) (G)

54.501 CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION (See Music Dept. Listings.) (G)

54.595 RESEARCH METHODS IN MUSIC AND MUSIC EDUCATION (See Music Dept. Listings.)

50.525 SEMINAR IN MATH EDUCATION (See Math Dept. Listings.)

29.501 (27.501) EDUCATIONAL IDEAS IN HISTORICAL PERSPECTIVE (3) Current trends and issues in education as reflecting and influencing the social, economic, and political forces in our cultural heritage.

29.507 (26.507) HOME, SCHOOL, COMMUNITY (3) The interaction between home and school and community in educational programs; survey and evaluation of techniques for working with parents; study of various agencies contributing to the education and well-being of children and youth at home and at school. Prerequisite: A course in Sociology and consent of Department of Education.

29.511 (28.511) SUPERVISION OF STUDENT TEACHING (3) An analysis of the roles of the cooperating teacher, college supervisor, and student teacher; current practices, issues, problems, trends and evaluation in laboratory experiences, current research. Prerequisite: Teaching experience.

29.517 (28.517) SCHOOL LAW (3) A study of the legal framework within which the public and non-public schools function. The course will give attention to the legal relationships among federal, state, and local governments;

the legal status of school districts, boards of education, and school administrators; the legal status of non-public schools; and the law regarding all facets of the school program, staff, and pupils. Prerequisite: Foundations of Education or equivalent.

29.549 AMERICAN POLITICS AND EDUCATION (3) The American political structure and its relation to policy making and administration of public education. Topics include educational opportunity, community responsibility and control, accountability, role of the courts, church-state relations, academic freedom. Prerequisite: Education 401 Foundations of Education and Political Science 103 or equivalent.

29.550 ANALYSIS AND MODIFICATION OF TEACHING BEHAVIOR (3) The analysis of teaching learning situations to aid the advanced teacher education students to develop, refine and prescribe skills and strategies and field work. Prerequisites: Teaching experience, supervisory experience, 29.471 and/or 29.511.

29.585 (28.495) INTERDISCIPLINARY SEMINAR IN PHILOSOPHY AND EDUCATION (3) An interdisciplinary seminar with two aspects: (1) Current thought in the philosophy of a variety of academic fields. (2) Their implications for the broad field of education. Concentration will be upon development in the present century.

29.595 INDIVIDUALIZED STUDY (3-6) Individually planned programs which will permit students to engage in research and/or field experiences relative to his professional growth. Prerequisites: Admission by application to the Graduate Program Coordinator, only.

(G) May be available for graduate credit. See Graduate Bulletin.

- 29.601 (28.601) REPRESENTATIVE AMERICAN EDUCATORS (3) A biographical approach to the development of American Education through selected group of American educators whose contributions have significantly shaped its form and substance from the colonial period to the present. Prerequisite: Educational Ideas in Historical Perspective.
- 29.607 SEMINAR IN EDUCATIONAL CLASSICS I: ANCIENT PERIOD THROUGH THE RENAISSANCE (3) An in-depth study of the classical works of selected authors. Concentration on liberalizing and humanizing influences. A seminar paper will be developed by each student. Prerequisites: Foundations of Education, or History of Education, or Educational Ideas in Historical Perspective.
- 29.609 SEMINAR IN EDUCATIONAL CLASSICS II: RENAISSANCE TO THE PRESENT (3) An in-depth study of the classical works of selected authors. Concentration on liberalizing and humanistic influences. Prerequisites: Foundations of Education, or History of Education or Educational Ideas in Historical Perspective.
- 29.621 (26.621) READING DISABILITIES (3) The content of this course includes the following: causes of reading disabilities; observation and interview procedures; standard and informal tests; report writing; materials and methods of instruction. Prerequisite: Curriculum I and II or consent of instructor.
- 29.623 (26.623) METHODS AND MATERIALS IN TEACHING READING IN THE ELEMENTARY SCHOOL (3) For teachers-in-service and other professional school personnel who have not had professional courses in reading such as 26.427 or 26.429 (426). Covers trends in methods, materials, and individualized reading designs essential to the organization and administration of a functional reading program. Prerequisite: Curriculum I and II or consent of instructor.
- 29.625 (26.625) CLINIC PRACTICUM IN READING (3) A clinical or laboratory experience. Students diagnose and treat reading disability cases under the supervision of the directors of the reading program. Prerequisite: 29.621 and 29.623.
- 29.627 (26.627) EVALUATION OF READING RESEARCH (3) The student will be exposed to the tools of research and experimentation. The emphasis will be on past and present research relevant to reading. Prerequisite: Course in Tests and Measurement or Statistics and consent of instructor.
- 29.629 (26.629) SEMINAR IN READING (3) An advanced course to familiarize the student with interdisciplinary aspects of the reading process. The highlight of the course will be the team teaching aspect. Consultants such as psychologists, pediatricians, optometrists, guidance teachers, etc. will play an important role in this course. Prerequisite: 26.621 and 26.623.
- 29.631 DIAGNOSIS AND EVALUATION OF READING DISABILITIES (3) Emphasis on the practical uses of standardized and non-standardized instruments and procedures for evaluating reading disabilities. Prerequisites: 26.621 Reading Disabilities.
- 29.691 (28.691) INTRODUCTION TO RESEARCH IN EDUCATION (3) Research as a method for solving problems. Contributions of research to education. Prerequisite: Undergraduate course in Tests and Measurements, or Elementary Statistics, or consent of instructor.
- 29.699 (28.699) MASTER EDUCATION THESIS (3) Carefully executed investigation and accurate recording of a specific problem selected with reference to the student's professional goals and resources. Historical, descriptive, experimental, or action research can provide a single or multiple framework within which the student may work. Includes an outline of the proposed thesis submitted for inspection and approval by the Graduate Council, an application of techniques derived from the research course, and the guidance of Research Adviser.

English

Professors: BEVINS, HENRY, HUGHES, LEWIS, PLANTE (*Co-Chairman*),
SHEETS, THEARLE

Associate Professors: GUESS, HANSON, HEDGES, HILL, KOOMJOHN, WRIGHT, COULTER
CRAVER, FLOWER

Assistant Professors: CASKIE, CONNOLLY, DOUGLAS, DOWLING, ECONOMOU, FRIEDMAN
HAHN, HATCHER, JONES (*Co-Chairman*), WILKOTZ

Instructors: BUTLER, FRANKEL, THOMAS, WILLIAMS, WOLKOWITZ, WOOD

Every student in the College must complete 30.102 or 30.104 and one semester (3 credit hours) of a lower-division course in English, American, World Survey, Ideas in Literature, or Black American Literature: 30.201, 202, 204, 205, 211, 212, 213, 251, or 252. A student may offer a third course in English in partial fulfillment of the General Education Requirements of the College. He may, of course, offer other English credits as elective credit.

English Course Prerequisites

30.102 or 30.104 is prerequisite to all other English courses. The second course will be one of the following: 30.201, 30.202, 30.204, 30.205, 30.211, 30.212, 30.213, 30.251, 30.252. Concurrently with these courses, a student may take any lower-division (200-level) elective in English. Three English courses, including 30.102 or 30.104, are prerequisite to registration for upper-division (300-400 level) English courses.

English Major

To satisfy the requirements for the major a student must complete 36 semester hours of work in the departmental offerings in language, composition, and literature.

The 36 hours will include either 30.102 or 30.104, 30.204-30.205, 30.233. Four additional hours of lower division work may be counted toward a major, with 30.224 and 30.243 recommended.

Upper-division courses must include: 30.351 Approaches to English Study.

At least one course must be selected from the courses in Language or Literary Criticism: 30.325 (325) Historical Linguistics; 30.327 (327) Structural Linguistics; 30.332 (332) Comparative Grammar; 30.430 (430) History of the English Language; 30.431 (431) Structure of the English Language; 30.432 (432) Old English Language; 30.433 (433) Middle English Language; 30.405 (405) Literary Criticism I; 30.406 (406) Literary Criticism II.

At least one course from each of two of the following three lists of period courses: (a) Beginnings to 1700—30.302 (302) The English Renaissance; 30.303 (303) Seventeenth Century English Prose and Poetry; 30.319 (319) English Medieval and Renaissance Drama; 30.340 (340) Medieval Literature. (b) 1700-1832—30.320 (320) English Drama from the Restoration to Shaw; 30.335 (335) Literature of the English Romantic Period; 30.345 (345) Eighteenth Century English Prose and Poetry; 30.422 (422) Development of the English Novel I; 30.427 Literature of the American Romantic Period; 30.438 Prose of the English Romantic Period (c) 1832-1900—30.337 Victorian Prose and Poetry I; 30.338 Victorian Prose and Poetry II; 30.423, (423) Development of the English Novel II; 30.445 Nineteenth-Century American Novel; 30.447 Major American Poets to 1900.

One course must be selected from Major Figure courses: 30.410 (410) Chaucer; 30.412 (412) Milton; 30.415 (415) Shakespeare (Comedies); 30.416 (416) Shakespeare (Tragedies).

One upper-division course from any one of the above lists or from other departmental electives must be in American literature.

The English Department strongly recommends that every major complete at least the intermediate level of a foreign language.

The Department participates in the Advanced Placement Programs of the College. A selected number of entering freshmen are placed in 30.104 rather than in 30.102. It also participates in the Credit for Prior Experience Program. Students applying for credit under the program complete an examination, an interview, and a paper in the area.

Students interested in majoring in English or in participating in any of its programs should consult their advisers, and one of the co-chairs of the Department. Majors must register with the Department and are urged to consult with their advisers during each pre-registration period.

Teacher Education Program for English Majors

The Education Department requires that a student preparing to teach English take either 30.332 Comparative Grammar or 30.431 Structure of the English Language. It strongly recommends in addition either 30.327 Structural Linguistics or 30.430 History of the English Language. Further recommendations are 30.226 Introduction to Classical Mythology, 30.331 Advanced Composition, and either 30.251-52 or 30.401, Black Literature.

ENGLISH COURSES (ENGL)

Lower Division — Undergraduate

- 30.102 (102) FRESHMAN COMPOSITION (3) Review of grammar, writing of compositions, and reading of various forms of literature.
- 30.104 (104) ADVANCED FRESHMAN ENGLISH (3) Readings in expository and imaginative literature, short compositions, and research experience. Open only to freshmen selected by the English Department on the basis of superior high school records and aptitude test scores; for them 30.104 replaces 30.102.
- 30.201 (333) READINGS IN WORLD LITERATURE I (3) European writings in translation from the time of Homer to the Renaissance.
- 30.202 (334) READINGS IN WORLD LITERATURE II (3) European writings in translation from the Renaissance to 1900.
- 30.204-30.205 ENGLISH LITERATURE I, II (3, 3) First semester — the Middle Ages through the Neoclassical Age; second semester — the Romantics through the moderns.
- 30.210 (210) INTRODUCTION TO FOLKLORE (2) Celtic and other types of folklore which provide a wide and varied background for literature.
- 30.211 (307) AMERICAN LITERATURE I (3) Major writers from the Colonial Period to the Civil War.
- 30.212 (308) AMERICAN LITERATURE II (3) Major writers since the Civil War.
- 30.213 IDEAS IN LITERATURE (3) A thematic approach to selected American, British, and World Literature.
- 30.215 (215) THE BALLAD (2) The popular ballad as a literary form: its origin, sources, characteristics, and literary influence.
- 30.224 (224) ELEMENTS OF FICTION (2) Techniques of fiction, with emphasis on the short story.
- 30.226 (226) INTRODUCTION TO CLASSICAL MYTHOLOGY (3) The study of myth in selected works from Greek and Roman literature.
- 30.233 (233) ELEMENTS OF POETRY (3) Versification, and the forms and purposes of poetry.
- 30.243 (102) ELEMENTS OF DRAMA (2) Forms of drama, with emphasis upon structure and conventions.
- 30.251-252 BLACK AMERICAN LITERATURE I, II (3, 3) First semester — Early European travelogues, the problems of prejudice, psychological motives in Black history movements, and racial climates of various literary periods studied in conjunction with a survey of the literature of Black American, 1619 to present; second semester — Major contemporary black writers in fiction and drama, including Wright, Ellison, Jones, Hughes. 251 is recommended but not required as a prerequisite to 252.
- 30.283 INTRODUCTION TO IMAGINATIVE WRITING (2) Theories and technical considerations pertinent to writing poetry and fiction, with discussion of student writing.

Upper Division — Undergraduate Only

- 30.328 HISTORY AND LITERATURE OF THE OLD TESTAMENT (3)** The chief books of the Old Testament and the Apocrypha studied from a literary and historical point of view.
- 30.331 ADVANCED COMPOSITION (3)** Study of expository style and practice in writing and criticizing non-fiction prose, with attention to individual student writing concerns and analysis of student writing in class.
- 30.332 (332) COMPARATIVE GRAMMAR (3)** Study of English grammar; traditional, structural, transformational.

- 30.351 APPROACHES TO ENGLISH STUDY (3)** English as an academic discipline, critical approaches to literature; methods of investigation in language and literature. (Restricted to undergraduate English majors. To be elected as soon as the English major has completed 3 lower-division courses in English.)
- 30.383 (383) IMAGINATIVE WRITING (3)** The nature of the creative process and the art of imaginative expression. Concentration in writing fiction or in writing poetry, alternating in different semesters. Prerequisite: Upper division standing and consent of instructor.

Upper Division — Undergraduate and Graduate

- 30.301 TOPICS IN WORLD LITERATURE (2 or 3)** Consideration of special figures, periods, genres, or conventions. Variation in content from year to year; may be re-elected.
- 30.302 (302) THE ENGLISH RENAISSANCE (3)** Non-dramatic literature of the Elizabethan period. (Formerly 424)
- 30.303 SEVENTEENTH CENTURY ENGLISH PROSE AND POETRY (3)** Major English non-dramatic literature of the seventeenth century; the approach will be both critical and historical.
- 30.305 TOPICS IN ENGLISH LITERATURE (2 or 3)** Consideration of special figures, periods, genres or conventions. Variation in content from year to year; may be re-elected.
- 30.309 AMERICAN DRAMA (3)** A study of American drama from the beginning to the present.
- 30.311 TOPICS IN AMERICAN LITERATURE (2 or 3)** Consideration of special figures, periods, genres, or conventions. Variation in content from year to year; may be re-elected.
- 30.312 (312) WORLD DRAMA I (3)** An historical and critical study of world drama and the cultural forces which produced it from the ancient Greeks to the Neo-Classical period.
- 30.313 (313) WORLD DRAMA II (3)** An historical and critical study of world drama and the cultural forces which produced it from the Neo-Classical period to the late nineteenth century.
- 30.317 (317) LITERARY BIOGRAPHY (3)** Critical reading from the literary point of view of important biographies, principally English and American.
- 30.319 (319) ENGLISH MEDIEVAL AND RENAISSANCE DRAMA (3)** Development of the English Drama from the Middle Ages through the Renaissance, excluding Shakespeare
- 30.320 (320) ENGLISH DRAMA FROM THE RESTORATION TO SHAW (3)** Development of the English Drama in the seventeenth, eighteenth, and nineteenth centuries.
- 30.321 (321) MODERN DRAMA (3)** Critical reading of plays of the late nineteenth century and the twentieth century.
- 30.323 THE CONTINENTAL NOVEL (3)** A study of major continental novels in translation. Emphasis will be upon related and comparative elements in the novels of writers of France, Germany, Italy and other European countries.
- 30.325 (325) HISTORICAL LINGUISTICS (3)** An introduction to language typology and Indo-European philology; historical development of linguistics up to the twentieth century.
- 30.326 (326) MYTH AND LITERATURE (3)** The reinterpretation of themes and figures from Greek and Roman mythology.
- 30.327 (327) STRUCTURAL LINGUISTICS (3)** A study of the developments in linguistic theory in the twentieth century; major figures, DeSaussure, Sapir, Bloomfield, Trubetzkoy, Chomsky.
- 30.329 HISTORY OF AMERICAN ENGLISH (3)** Origins and history of American dialects; development of elements of vocabulary, sounds, and grammar which distinguish American English; standards of American English.
- 30.335 (335) LITERATURE OF THE ENGLISH ROMANTIC PERIOD (3)** Major writers, social and political background, important literary ideas, and criticism.
- 30.337 VICTORIAN PROSE AND POETRY I (3)** A study of the works of Tennyson, Arnold; and the Victorian "prophets" — Macaulay, Carlyle, Newman, and Mill.
- 30.338 VICTORIAN PROSE AND POETRY II (3)** A study of the works of Browning; Ruskin and the Pre-Raphaelites; Pater, Hardy, Housman, and Yeats.
- 30.340 (340) MEDIEVAL LITERATURE (3)** English literature during the Middle Ages, with emphasis on the mystical writers, *Piers Plowman*, the Gawain-poet, and Arthurian literature.

- 30.345 (345) EIGHTEENTH CENTURY ENGLISH PROSE AND POETRY (3) A study of backgrounds, literary trends, and significant authors, with emphasis on Swift, Pope, Johnson, and Boswell.
- 30.401 THE LITERATURE OF BLACK AMERICA (3) The literature of black expression in the United States with emphasis on the twentieth century. Non-fiction, fiction, and poetry by black writers will be studied.
- 30.405 (405) LITERARY CRITICISM I (3) History and principles of literary criticism. Specified prerequisites and consent of instructor.
- 30.406 (406) LITERARY CRITICISM II (3) Practice in writing literary criticism. Specified prerequisites and consent of instructor.
- 30.407 (407) MODERN POETRY (3) Work of the important twentieth century poets. (Formerly 319)
- 30.408 (408) MODERN FICTION TO WORLD WAR II (3) Work of the modern masters of fiction.
- 30.409 (409) MODERN FICTION SINCE WORLD WAR II (3) Works of the significant writers—English, American, and Continental—of the past twenty years. The works of these writers carry on or challenge the tradition established by the modern masters of fiction.
- 30.410 (410) CHAUCER (3) A study of the major poetry.
- 30.412 (412) MILTON (3) A study of the poetry and major prose works.
- 30.415 (415) SHAKESPEARE (COMEDIES) (3) Shakespeare's development as a poet and a dramatist during the period of the comedies and historical plays.
- 30.416 (416) SHAKESPEARE (TRAGEDIES) (3) The great tragedies and the late romantic comedies of Shakespeare.
- 30.419 TWENTIETH-CENTURY BRITISH NOVEL (3) Survey of the British novel from Conrad to the present.
- 30.420 TWENTIETH-CENTURY BRITISH POETRY (3) Survey of British poetry from Hopkins to the present.
- 30.422 (422) DEVELOPMENT OF THE ENGLISH NOVEL I (3) History and development of the English novel through the eighteenth century.
- 30.423 (423) DEVELOPMENT OF THE ENGLISH NOVEL II (3) History and development of the English novel through the nineteenth century.
- 30.427 LITERATURE OF THE AMERICAN ROMANTIC PERIOD (3) Major writers, social and political background, important literary ideas, and criticism.
- 30.430 (430) HISTORY OF THE ENGLISH LANGUAGE (3) Changes and reasons for the changes in grammar, sound, and vocabulary of the language, from Old English to modern times.
- 30.431 (431) STRUCTURE OF THE ENGLISH LANGUAGE (3) A linguistic approach to sounds, forms, syntax, and usage.
- 30.432 (432) OLD ENGLISH LANGUAGE (3) Grammar and syntax of Old English; translation of elementary texts; introduction to Germanic philology.
- 30.433 (433) MIDDLE ENGLISH LANGUAGE (3) Grammar and syntax of Middle English; study of Middle English dialects; reading of selected texts of twelfth to fifteenth centuries.
- 30.435 AMERICAN SHORT STORY (3) A study of the American short story from the beginning to the present.
- 30.437 SURVEY OF ENGLISH PROSE (3) A survey of non-fictional prose in English literature from 1500 to the present.
- 30.438 PROSE OF THE ENGLISH ROMANTIC PERIOD (3) Readings in the prose of the English Romantic Period with emphasis on Keats, Coleridge, Hazlitt, Lamb, and DeQuincey.
- 30.445 NINETEENTH CENTURY AMERICAN NOVEL (3) A study of major American novelists of the nineteenth century with emphasis on Cooper, Melville, Hawthorne, Howells, James, Crane, and Norris.
- 30.446 TWENTIETH CENTURY AMERICAN NOVEL (3) A study of major American novelists of the twentieth century with emphasis on James, Fitzgerald, Hemingway, Faulkner, Malamud, Bellow, Barth, and Nabokov.
- 30.447 AMERICAN POETRY TO 1900 (3) A study of American poetry from its beginnings through the 19th century. Emphasis on major figures.
- 30.448 TWENTIETH-CENTURY AMERICAN POETRY (3) A study of major American poets since 1900.
- 30.485, 486 (440, 441) SEMINAR IN ENGLISH STUDIES (3, 3) Thorough study of one major area of literature (author, period, movement, etc.) not available through other electives. Areas covered will vary from semester to semester. Emphasis on research and scholarly writing with extensive research paper required. Open only to seniors and, with consent of the instructor, to juniors having an exceptionally strong background in English. May be taken one or two semesters.
- 30.491 (480) DIRECTED READING IN ENGLISH (2-4) Independent reading in literature or in literature and related disciplines dealing with specific periods, topics, problems or comparative developments selected by the student in consultation with the instructor. Prerequisites: 18 hours in English or 12 hours in English and 6 hours in the related discipline, a minimum average of 3.00 in English and the related discipline, and the consent of the Department Chairman and the instructor involved.

30.494 TRAVEL AND STUDY (3-6) Countries and topics to be selected by the Departments and instructors sponsoring the program. For enrollment procedures, write the Chairman of the Department early in the fall of the academic year preceding the summer of intended study.

30.521 STUDIES IN ENGLISH LITERATURE (3) Thorough study of one major area of English Literature (author, period, movement, etc.). Areas covered will vary from semester to semester. Substantial research required. Prerequisite: Graduate standing and consent of instructor.

30.523 STUDIES IN LITERARY CRITICISM (3) Thorough study of one major area of Literary Criticism (author, period, movement, etc.). Areas covered will vary from semester to semester. Substantial research required. Prerequisite: Graduate standing and consent of instructor.

30.525 STUDIES IN AMERICAN LITERATURE (3) Thorough study of one major area of American Literature (author, period, move-

30.497-498 COLLOQUIUM IN ENGLISH (3, 3) A two semester course of reading and critical discussion, ranging over the spectrum of literature, conducted by a team of three instructors on a discussion/tutorial basis.

ment, etc.). Areas covered will vary from semester to semester. Substantial research required. Prerequisite: Graduate standing and consent of instructor.

30.527 STUDIES IN WORLD LITERATURE (3) Thorough study of one major area of World Literature (author, period, movement, etc.). Areas covered will vary from semester to semester. Substantial research required. Prerequisite: Graduate standing and consent of instructor.

30.531 STUDIES IN LINGUISTICS (3) Topics in the technology and philosophy of language: descriptive grammar, psycholinguistics, sociolinguistics, etc. Topic to vary. Prerequisite: Graduate standing and consent of instructor.

Geography

Professors: BEISHLAG, FIRMAN

Associate Professors: DIFFENDERFER (*Chairman*), MARTIN

Assistant Professor: HAYUK

Instructors: HARLIN, MCKIM, STEVENSON, WALTON

The Department offers a major and a minor in geography. The purpose of the major is to encourage the student to explore the discipline in some depth. Such investigation, performed well, leads to an appreciation of the structure and function of the area, prepares the student for graduate work, and offers excellent background for many careers, particularly teaching and certain types of government service. The student is also expected to take correlative courses which broaden his academic background and offer valuable insights into the subject.

Geography Major

Thirty credit hours are required as a minimum for the major in geography, of which a minimum of nine credit hours must be selected from courses with a Lower Division number (100-200) and a minimum of twenty one credit hours from Upper Division courses. At least nine credit hours of Upper Division level courses (300-400) must be from those designated as systematic or technique courses.

Geography Minor

Eighteen credit hours are required for a minor in geography, of which a minimum of six credit hours must be selected from courses with a Lower Division number (100-200) and a minimum of twelve credit hours from Upper Division courses (300-400).

Geography Course Prerequisites

Some Lower Division course work in geography or consent of the instructor are general prerequisites for all Upper Division courses, with the exceptions specified under some courses. Graduate courses require graduate status, consent of the instructor and indicated prerequisites.

Transfer Students

Transfer students must take a minimum of 18 credits of upper division courses in geography to fulfill requirements for the major.

Master of Arts in Geography

The Master of Arts in Geography is designed for students who are primarily interested in an advanced degree.

Masters in Education (emphasis in geography, see Secondary Education).

Admission to Courses in Geography for Graduate Credit

1. Acceptable achievement on the Graduate Record Examination in geography.
2. At least an undergraduate minor in geography or the equivalent.
3. At least a 3.00 or "B" grade average in the geography courses presented for admission.
4. Under extraordinary or peculiar circumstances an applicant who does not meet all of the above requirements may petition the Department of Geography for admission.

Program for the Master of Arts in Geography

1. Candidacy: After 9 semester hours and before the completion of 15 hours of graduate study in geography.
2. Number of 500 level courses: At least 15 semester hours in Graduate Geography must be earned at the 500 level.
3. Grade Average: A student must maintain a 3.00 average after candidacy.
4. Comprehensive Examination: The department reserves the option of requiring or not requiring this examination after the completion of 9 semester hours prior to the completion of the semester in which 15 hours are attained.
5. Statute of Limitations: All requirements must be completed by August of the seventh year of graduate study.
6. Credit Transfer: Six semester graduate hours in geography may be transferred from another institution and applied. A student may petition the department for consideration of transfer credits that exceed six semester graduate hours.
7. Specific Requirements.
 - a. Each student, in consultation with his advisor, will prepare a program of study in geography and will present it to a Graduate Committee of the Geography Department. Candidates may be required to justify their program before the Committee.
 - b. Presentation of evidence of at least a fourth semester of college level competency in one modern language OR proficiency in statistics or computer science.
 - c. Thesis: Students may elect Plan A which will require a thesis to demonstrate a student's ability to do independent research or students may elect Plan B which requires no thesis.
 - d. Prescribed Courses:

Plan A		Plan B	
Seminar 34.481	3 hours	Seminar 34.481	3 hours
Research Techniques		Regional Seminar 34.671	3 hours
34.521	3 hours	Electives	30 hours
Thesis 34.697	6 hours		
Electives	18 hours		
	<u>30 hours</u>		<u>36 hours</u>

GEOGRAPHY COURSES (GEOG)

Lower Division — Undergraduate

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| <p>34.101 (103) ELEMENTS OF GEOGRAPHY I (3)
Introductory topical studies of fundamental natural and selected cultural phenomena in man's environment. Emphasis on climate, landforms, soils, vegetation, and minerals.</p> <p>34.102 (104) ELEMENTS OF GEOGRAPHY II (3)
Introductory regional studies of man in relation to his natural and cultural environments. Emphasis is on the distinctive and comparative nature of major regions; man's utilization of resources.</p> <p>34.121 INTERPRETATION OF MAPS (3) Intro-
duction to map elements and map interpreta-
tion; study of various types of maps, index
systems, and general application of maps in
geography.</p> <p>34.221 (307) CULTURAL GEOGRAPHY (3)
Study of origins and diffusion of cultures and</p> | <p>the resulting impact in creating the world's
contrasting cultural landscapes.</p> <p>34.231 (316) ECONOMIC GEOGRAPHY (3) Re-
gional distribution of the world's resources,
industries, and population; emphasis upon
problems of international trade. An analysis
of the productive and extractive industries,
manufacturing and commerce in relation to
the geographic environment.</p> <p>34.299 INTRODUCTION TO SOURCE MATERI-
ALS AND RESEARCH IN GEOGRAPHY (3)
Designed to provide the student with a basic
working knowledge of research materials;
study and review of principal reference litera-
ture, journals, and other sources of data
used in geographic field and library research.
Students may be required to do field work.</p> |
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Upper Division — Undergraduate and Graduate

SYSTEMATIC COURSES

- 34.001 FIELD RESEARCH IN PLANNING (3) Field research in contemporary planning problems in the suburban environment. Research projects conducted under supervision of the Baltimore County Office of Planning and Zoning and the Department of Geography. Open only to senior geography majors with department approval.
- 34.002 INTRODUCTION TO URBAN PLANNING (3) A survey of principles in current practice of urban and regional planning for students seeking an introduction to the field. Extensive reference to activities and techniques of planning agencies in the Baltimore region. Open to upper classmen.
- 34.003 PRINCIPLES OF ZONING (3) Introduction to the field of zoning; applicable to studies in urban geography, real estate, and sociology. Background of zoning, principles, uses, limitations, regulations, adoption procedures, and related problems.
- 34.005 URBAN DESIGN — MAN-SPACE-ENVIRONMENT (3) Introduction to urban design; the city as an experience as viewed through physical structuring and social and physical focal points; role of landscaping in urban design. Prerequisites: 34.101-102 or consent of instructor.
- 34.319 SOILS AND VEGETATION (3) A resource study of the world's soil and plant formations with emphasis placed upon genesis and spatial differentiations. Prerequisites: 34.101, 102 or consent of instructor.
- 34.361 ADVANCED ECONOMIC GEOGRAPHY (3) Studies mainly of the secondary and tertiary industries with some emphasis on quantitative analyses of selected economic activities.
- 34.371 (301) ADVANCED PHYSICAL GEOGRAPHY (3) Detailed analysis of characteristics, distribution, and geographical significance of the earth's physical features.
- 34.373 (395) CLIMATOLOGY (3) Character, causes, and distribution of climatic types. Emphasis upon world patterns. Students may be required to do field work.
- 34.375 QUANTITATIVE METHODS IN GEOGRAPHY (3) Focus on statistical problems associated with the analysis of geographic data. Emphasis on the unique spatial problems of point pattern analysis, areal association, and regionalization.
- 34.377 DESCRIPTIVE METEOROLOGY (4) An introduction to the various meteorological elements. Emphasis is placed on the interaction of temperature, pressure, wind, and moisture in creating weather patterns. Three hours of lecture and two hours of laboratory. Field work may be required.
- 34.381 (331) POLITICAL GEOGRAPHY (3) Effect of political groupings upon man's use of the world, and the influence of the geographic base upon political power.
- 34.385 GEOGRAPHY OF POPULATION AND SETTLEMENT (3) Regional analysis of environmental resource factors contributing to various population densities and the resultant settlement patterns of man's use of the land. Prerequisites: 3 credits of geography in 100 or 200 series or consent of instructor.
- 34.391 (413) URBAN GEOGRAPHY (3) Survey of the structure, functions, forms and development of urban units. Emphasis upon the locational features of social, economic, and cultural phenomena. Field work.
- 34.401 GROWTH OF GEOGRAPHIC THOUGHT (3) History, nature, and methodology of geography as a discipline. Analysis of schools of geographic thought; critical evaluation of important geographic works.

TECHNIQUE COURSES

- 34.321 (300) INTERPRETATION OF AERIAL PHOTOGRAPHS (3) Reading and interpretation of aerial photographs. The application of the aerial photograph in the fields of geography, geology, and photogrammetry.
- 34.323 (330) CARTOGRAPHY AND GRAPHICS I (3) Study in design, construction, and effective application of maps and charts for analysis and publication; practical exercises in the use of cartographic tools, materials, and techniques.
- 34.324 CARTOGRAPHY AND GRAPHICS II (3) Advanced exercises in map graphics and areal distribution maps. New techniques in presentation of graphic data and spatial relationships.
- 34.327 MAP ANALYSIS AND INTERPRETATION (3) Principal types of maps and their uses. Emphasis on understanding map components and the range of physical and cultural phenomena indicated on maps. Includes selected exercises which illustrate the analytical and graphical values of maps.
- 34.341 TECHNIQUES AND MATERIALS FOR GEOGRAPHY TEACHERS (3) A systematic review of geographic concepts in relation to interdisciplinary studies in the physical and social sciences. Examination of the content of geography and problems of presentation.

REGIONAL COURSES

- 34.421 (230) **GEOGRAPHY OF ANGLO-AMERICA** (3) Common social, economic, and political interests of the major regions of the United States and Canada. The culture patterns of each region in relation to the natural settings in which they have developed.
- 34.423 (320) **HISTORY AND GEOGRAPHY OF MARYLAND** (3) Political, social and economic development of the state and its relation to major events in the development of the nation. Natural resources; regional land use; Industrial development, particularly in the Baltimore area. Field trips. Field trip expenses about \$15.00, payable when trips are taken.
- 34.431 (318) **GEOGRAPHY OF AFRICA** (3) Material resources and human geography of Africa. Problems of economic development, nationality and cultural conflicts.
- 34.441 (390) **GEOGRAPHY OF AUSTRALIA AND OCEANIA** (3) Regional approach in analyzing and interpreting the physical and cultural patterns, natural resources, current problems, and strategic importance of the Pacific world.
- 34.443 (315) **GEOGRAPHY OF EAST ASIA** (3) Regional studies of the physical and cultural foundations in China, Japan, and Korea. Emphasis upon human and economic resources, and role in world affairs.
- 34.445 (314) **GEOGRAPHY OF SOUTH AND SOUTHEAST ASIA** (3) Regional studies of

the physical and cultural foundations of India, Pakistan, Ceylon, Philippines, and Indonesia. Principal human and economic resources, problems of development, and role in world affairs.

- 34.447 **ECONOMIC AND POLITICAL GEOGRAPHY OF THE MIDDLE EAST** (3) A regional and systematic analysis of Southwest Asia and North Africa. Study of major natural and cultural resources and related patterns of spatial organization, economic and political development, and associated problems.
- 34.451 (311) **GEOGRAPHY OF EUROPE** (3) Regional analysis and appraisal of the human geography and natural resources of Europe. Problems of nationality, economic development, and cultural conflicts.
- 34.453 (319) **GEOGRAPHY OF THE USSR** (3) Physical and cultural patterns and their bearing on the Soviet Union as a world power. Regional distribution and use of natural and human resources in agriculture and industry. Problems in economic development and production.
- 34.461 (309) **GEOGRAPHY OF LATIN AMERICA** (3) Distribution and character of the economic activities in various Latin American countries in relation to physical and cultural features. Resources and problems of their development; importance of foreign trade to the economy; relationship with the United States.

SEMINARS AND SPECIAL COURSES

- 34.481 **SEMINAR: SELECTED TOPICS IN GEOGRAPHY** (3) Reading and research in selected topics in the field of geography. Seminar topics will be announced.
- 34.483 (487) **SEMINAR: THE AMERICAS** (3) Individual study in selected problems of the geography of the Americas.
- 34.485 (488) **SEMINAR: SOUTH ASIA** (3) Reading, research, and discussions on special topics related to India, Pakistan, Ceylon, the Himalayan Kingdoms, and Afghanistan.
- 34.487 (489) **SEMINAR: GEOGRAPHY AND MAN IN THE 20TH CENTURY** (3) Selected studies on the role of geographic factors in economic and political affairs and in the development of technology. Analysis of contributions of applied geography to the solution of urban and rural problems.
- 34.489 **SEMINAR: STUDIES IN ENVIRONMENTAL QUALITY** (3) Studies of selected problems in the quality of man's physical and cultural environments. Readings, discussions, and research on geographical and other aspects of man's use of natural resources and major forms of environmental pollution. Prerequisites: 34.101, 34.102, or consent of instructor.
- 34.493 **FIELD GEOGRAPHY** (2-6) Practical lab-

oratory experience in techniques in the collection and analysis of data by observations, measurements, mapping, and photographic records. Such techniques are to be applied to selected geographic problems.

- 34.494 **TRAVEL AND STUDY** (3-6) Countries and topics to be selected by departments and instructors sponsoring the program. For complete information write the chairman of the department early in the Fall of the academic year preceding the summer of intended study. Prerequisite: Upper division status and consent of instructor.
- 34.495 **DIRECTED READING IN GEOGRAPHY** (3) Independent reading in selected areas of geography. Open by invitation of the geography department to students taking a major or minor in geography. Prerequisite: 15 hours of geography and a minimum average of 3.0 in geography courses.
- 34.496 **INDEPENDENT STUDY IN GEOGRAPHY** (1-6) Independent research, study, or field experience under supervision of a member of the Geography faculty. Designed for advanced students who wish to conduct independent investigations on aspects of Geography which are of special interest or not covered in other courses.

Graduate Division

- 34.521 RESEARCH TECHNIQUES IN GEOGRAPHY (3) A course designed to investigate the primary sources of information in geography and to learn the nature of original investigation.
- 34.571 STUDIES IN PHYSICAL GEOGRAPHY (3) The study of selected geographical topics dealing with physical landscape phenomena, especially in regards to distribution, relationships, and significance to man. Topics will be announced. No more than six semester hours may be applied toward a degree.
- 34.581 SEMINAR IN POLITICAL GEOGRAPHY (2-6) Special subjects dealing with the geography of international politics, e.g. boundary problems, global strategy, space, sovereignty. Topics to be announced. No more than six semester hours may be applied toward a degree.
- 34.583 SEMINAR: ENVIRONMENTAL PROBLEMS IN MARYLAND (3) Individual research on a selected environment problem in Maryland; oral and written presentations. Prerequisite: Graduate status and either geography major, previous work in Maryland, previous seminar, or consent of instructor.
- 34.591 URBAN GEOGRAPHY STUDIES (2-6) Selected topics dealing with the application of geography to planning, retail and industrial location, and trade analysis. Topics to be announced. No more than six semester hours may be applied toward a degree.
- 34.601 LAND USE STUDIES (2-6) Certain selected problems on urban, rural and rural-urban landscapes which consider and account for geographic differences in land utilization. Topics will be announced. No more than six semester hours may be applied toward a degree.
- 34.671 SEMINAR IN REGIONAL GEOGRAPHY (2-6) The description, analysis and interpretation of natural and cultural phenomena in certain significant geographic regions. Seminar topics will be announced. No more than six semester hours may be applied toward a degree.
- 34.697 RESEARCH (2-6) Directed investigation of a pertinent and appropriate geographical problem or problems based upon field and library study, which will contribute to geographical knowledge. Designed for the Masters thesis credit or individual research.

Attention is also called to the following courses:

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| 24.331 COMPARATIVE ECONOMIC SYSTEMS
(Economics Department) | 64.222 GEOMORPHOLOGY (Physical Sciences) |
| 64.121 GENERAL GEOLOGY (Physical Sciences) | 50.231 BASIC STATISTICS (Mathematics) |

Health Science

Professor: BRUESS (*Chairman*)

Associate Professors: AINLEY, OSMAN

Assistant Professors: GALLAGHER, GOETZ

Instructors: AGLEY, JOHNSON, KAPLAN, McMAHON

The health science courses are geared to bridge the gap between scientific health discoveries and man's application of these to daily living, to develop man's potential to an optimal level, to aid in the selection of healthy behavior patterns for man and his environment, and to help man make the most of life.

Major in Health

The undergraduate major in health is specifically designed to allow the student to select one of three specializations—school health, public health, or school and public health. Depending upon the specialization selected, sufficient background will be acquired to deal with health in elementary and secondary schools or in community and public health agencies. The foundation for graduate education in school or public health is also provided the health major student.

Requirements for the Health Major

In addition to the General College Requirements, the following courses are required of health majors:

School Health Specialization

Professional Education; 29.101 Careers in Education, 70.203 Educational Psychology, 28.319 Survey of Educational Programs, 27.401 Foundations of Education, 27.398 Student Teaching, and 38.205 Health Education in the School II. Health Requirements; 38.101 Current Health Problems, 38.103 First Aid, 38.201 Health Education in the School I, 38.202 Principles and Practices in Public Health, 38.208 Mental Health, 38.401 Sex Education and Family Life, 38.402 Health Seminar, 38.405 Drugs in Our Culture, and two health elective courses. Other Required Courses; 14.101 Contemporary General Biology, 22.100 Chemistry for Non-Scientists or 22.101 General Chemistry, 14.113 Human Anatomy and Physiology, 14.114 Human Anatomy and Physiology, 14.315 Medical Microbiology, 70.101 General Psychology, 80.101 Introduction to Sociology, 50.231 Basic Statistics (special section for health majors), and two semesters of physical education electives.

Public Health Specialization

Health Requirements; 38.101 Current Health Problems, 38.104 Parental and Child Health, 38.201 Health Education in the School I, 38.202 Principles and Practices in Public Health, 38.208 Mental Health, 38.302 Preparation for Field Work in Public Health, 38.303 Field Work in Public Health, 38.311 Epidemiology, 38.451 Ecological Aspects of Health, and two health elective courses. Other Required Courses; 14.101 Contemporary General Biology, 22.101 General Chemistry, 22.102 General Chemistry, 14.315 Medical Microbiology, 16.101 Introduction to Business Management, 24.101 Economic Principles and Problems I, 24.201 Economics of Health, 70.101 General Psychology, 80.101 Introduction to Sociology, 50.231 Basic Statistics (special section for health majors), and two semesters of physical education electives. It is strongly recommended that students electing the public health track also complete a minor in sociology, biology, psychology, or other appropriate related area.

School and Public Health Specialization

Professional Education; 29.101 Careers in Education, 70.203 Educational Psychology, 28.319 Survey of Educational Programs, 27.401 Foundations of Education, 27.398 Student Teaching, and 38.205 Health Education in the School II. Health Requirements; 38.101 Current Health Problems, 38.103 First Aid, 38.201 Health Education in the School I, 38.202 Principles and Practices in Public Health, 38.208 Mental Health, 38.302 Preparation for Field Work in Public Health, 38.303 Field Work in Public Health, 38.401 Sex Education and Family Life, 38.402 Health Seminar, 38.405 Drugs in Our Culture, and one health elective course. Other Required Courses; 14.101 Contemporary General Biology, 22.100 Chemistry for Non-Scientists or 22.101 General Chemistry, 14.113 Human Anatomy and Physiology, 14.114 Human Anatomy and Physiology, 14.315 Medical Microbiology, 70.101 General Psychology, 80.101 Introduction to Sociology, 50.231 Basic Statistics (special section for health majors), and two semesters of physical education electives.

Graduate Program

A specialization in health education as part of a Master of Education program in Secondary Education has recently become available. For further information consult the graduate studies bulletin.

Lower Division — Undergraduate

- 38.101 **CURRENT HEALTH PROBLEMS (3)**
Health problems of current interest or importance on an individual, community, national, and international basis. Includes a general overview of the state of the nation's health.
- 38.103 **FIRST AID (2)** Designed for people who may be called upon to give first aid care in the course of their daily activities. Course content of the American Red Cross Standard and Advanced First Aid Courses is included. Red Cross First Aid Certificates awarded. (Does not meet general college graduation requirements.)
- 38.104 **PARENTAL AND CHILD HEALTH (3)**
An introduction to parental and child health in its contemporary, social, and cultural setting. Discussion will include parenthood, prenatal care, growth and development of the child, the school environment, physical handicaps, and public health programs serving the maternal, infant, and preschool populations. Prerequisite: 38.101.
- 38.201 **HEALTH EDUCATION IN THE SCHOOL I (3)** An introductory overview of the total school health program with emphasis on what health education is, what health services are available, and guidelines for teaching elementary and secondary school health education. Prerequisite: 38.101.
- 38.202 **PRINCIPLES AND PRACTICES IN PUBLIC HEALTH (3)** Principles and practices in the field of public health, and the organization and administration of various agencies. Major public health problems. Prerequisite: 38.101.
- 38.203 **FIRST AID INSTRUCTORS (2)** American Red Cross First Aid Course for Instructors certification. Prerequisite: 38.103 (Does not meet general college graduation requirements.)
- 38.204 **NUTRITION (2-3)** A basic course covering the chemical nature and utilization of nutrients; the composition, digestion, absorption of foods; and the normal nutritional requirements of the human body, with attention to the relationship between nutrition and general health. Prerequisite: Chemistry 22.101, or consent of instructor. (Does not meet general college graduation requirements.)
- 38.205 **HEALTH EDUCATION IN THE SCHOOL II (3)** An in-depth consideration of the total school health program with emphasis on interpretation of school health services, analysis of selected health education curriculum guides, development of teaching materials, and actual observation and participation in health education in elementary and secondary schools. Prerequisites: 38.101, 38.201, 50.231.
- 38.206 **HEALTH AND URBAN LIVING (3)**
Study of those conditions of urban living with particular relevance for the health and well-being of urban dwellers. Nature, extent, and programs and problems in dealing with atmospheric pollution, water supply, housing, sanitation, behavioral disorders, mental illness, communicable disease, etc. Prerequisite: Health 38.101, Introduction to Sociology.

38.207 MEDICAL CARE IN THE UNITED STATES (3) An examination of the medical care process and the medical care system; the health occupations, hospitals, and related institutions; the drug industry; the organization of services and financing; the quasi-public sector, social values and responsibilities, and current trends in health care.

38.208 MENTAL HEALTH (3) Study of factors affecting mental adjustment in today's world. Emphasis is on positive aspects of mental adjustment and consumer decision making. Prerequisite: 38.101.

Upper Division — Undergraduate

38.302 PREPARATION FOR FIELD WORK IN PUBLIC HEALTH (3) Examination of techniques needed to work in various public health capacities; observation of public health situations. Prerequisites: 38.202, 50.231.

38.303 FIELD WORK IN PUBLIC HEALTH (8 or 14) Practical experience in participation in public health situations.

38.305 PUBLIC HEALTH ADMINISTRATION (3) A survey of current approaches to the

38.209 CONSUMER BEHAVIOR (3) The course is designed to examine consumer behavior in light of psychological, sociological, and ecological principles. Taught on an inter-departmental basis with the psychology department. Prerequisite: 38.101, 70.101.

38.221 HUMAN SEXUALITY (3) An individually oriented discussion course designed to explore the multi-disciplinary scope of human sexuality. An in-depth look at the physiological, psychological emotional, cultural, and social aspects of human sexuality will focus on establishing one's sexuality as a healthy entity. Prerequisite: 38.101.

theories, practices and organization of community health services administration. Prerequisites: Principles and Practices in Public Health (38.202)

38.311 EPIDEMIOLOGY (3) Introduction to epidemiology including study of factors governing the occurrence of diseases in populations. Laboratory problems are illustrative of basic epidemiologic methods. Prerequisites: 38.101, 14.101, and Consent of Instructor.

Upper Division — Undergraduate and Graduate

38.401 SEX EDUCATION AND FAMILY LIFE (3) Designed for the present and future teacher, the course includes an overview of human sexuality. Emphasis will be placed on the need for education about sexuality, theories of sexual education, selection of content, sequential unit planning, survey and availability of A-V materials and the qualifications of the effective sex educator. Prerequisites: 38.221 or 38.101, 70.201, 14.101.

38.402 HEALTH SEMINAR (3) Examination of recent trends in school and public health, reports of student projects, consultation with experts in health field. Prerequisite: Consent of department.

38.403 HEALTH EDUCATION CURRICULUM (3) Development of school health education programs based on health needs and problems of school children. Prerequisite: 38.101, 38.201.

38.405 DRUGS IN OUR CULTURE (3) An in-depth review of harmless, harmful, useful and useless substances which may affect

behavior or mood; the interaction of psychological, sociological and physiological components is included. Prerequisite: 38.101.

38.451 ECOLOGICAL ASPECTS OF HEALTH (3) An examination of the inter-relationship between man and his environment. Emphasis is placed upon health aspects of pollution, housing, sanitation, radiation, behavioral disorders and epidemiology. Prerequisites: 38.101, 80.101.

38.485 HEALTH WORKSHOP (3) For teachers, administrators, and individuals concerned about health related fields. Contemporary health aspects are considered with emphasis on implementation of positive behavior aimed at improving the health of the individual and the community. Enrollment is limited to 25. Prerequisite: Consent of Department.

38.497 HEALTH DIRECTED READINGS (1-3) Independent reading in health or related disciplines. Prerequisite: A minimum of 10 credits in health and consent of Department Chairman.

Graduate

38.501 PROBLEMS IN SCHOOL HEALTH (3) Designed to assist the student in developing an understanding of current problems in school health programs. The structure, organization, scope, content and practices in the field as revealed through literature and research is studied. Prerequisite: Consent of department.

38.511 CURRENT LITERATURE IN HEALTH (3) Critical analysis of current and past research findings concerning health knowledge, attitudes, behavior, and educational techniques. A comprehensive review of health-related periodicals is included. Prerequisite: Undergraduate major in health, consent of instructor, or 15 semester hours of health.

38.513 ANALYSIS OF PHYSIOLOGICAL CONCEPTS (3) Analysis of research and laboratory applications of the physiological factors that affect human efficiency before, during, and after exercise. Factors to be investigated include: metabolism, circulation-respiration, muscular physiology, endocrine system, ergogenic aids, environmental factors, etc. Prerequisite: Consent of Department chairman.

38.597 DIRECTED READINGS IN HEALTH (3) Individual study of a significant problem in health through consultation with appropriate faculty members. Emphasis is on increased knowledge of health. Prerequisite: Undergraduate major in health, consent of Instructor, or 15 semester hours of health.

Major in Medical Technology (Dr. Carl V. Henrikson, Director)

The four year program is designed to prepare allied health personnel for specialized work in hospital and medical laboratories and leads to the Bachelor of Science degree in Medical Technology. It provides sufficient background for the student to pass the medical technologist's examination for certification.

Requirements for the Medical Technology Major

In addition to the General College Requirements, the following courses are required of Medical Technology Majors: Biology; 14.101 Contemporary General Biology, 14.113 Human Anatomy and Physiology, 14.114 Human Anatomy and Physiology, 14.315 Medical Microbiology, four elective hours. Chemistry; 22.101 General Chemistry, 22.102 General Chemistry, 22.230 Essentials of Organic Chemistry, 22.210 Principles and Mechanisms of Chemical Analysis, four elective hours. Other Required Courses; 38.101 Current Health Problems, 50.115 Algebra and Trigonometry, 66.213 General Physics. Strongly Recommended Courses; 14.421 Immunology, 14.401 Genetics, 22.351 Biochemistry. Recommended Courses; 14.221 Introduction to Animal Parasitology, 38.204 Nutrition.

Ninety-six credit hours are to be completed in the first three years at Towson State College. During the fourth year, thirty-two credit hours are to be completed at Union Memorial Hospital, St. Joseph's Hospital, or other appropriate hospital determined by Towson State College. Before beginning the fourth year at the affiliated hospital, students must attain at least a 2.0 cumulative average, a minimum grade of C in all Biology and Chemistry courses, and be accepted by the respective hospital screening committee. During the fourth year, the twelve month course of study in the hospital includes:

Upper Division — Undergraduate Only

51.401-402 BLOOD BANK (0,3) Methods used in collecting blood and procedures required in preparing blood for blood bank.

51.403-404 CLINICAL BIOCHEMISTRY (0,8) Biochemical tests used in all medical diagnosis.

51.405-406 HEMATOLOGY (0,8) Blood cell morphology and various tests to determine their presence.

51.407-408 HISTOLOGIC TECHNIQUE (0,2) Methods and stains used in preparing smears and permanent slides of tissues.

51.409-410 DIAGNOSTIC MICROBIOLOGY (0,5) Stain preparations and chemical tests used in identifying bacteria and in diagnosing diseases caused by them.

51.411-412 HUMAN PARASITOLOGY (0, 2) Microscopic identifications of all disease producing organisms other than those caused by bacteria.

51.413-414 SEROLOGY (0,2) Identifications of the types of serous fluids and interpretations of tests showing these types.

51.415-416 URINALYSIS (0,2) Microscopic observations and chemical tests necessary to identify materials present in urine.

History

Professors: ANDREWS, BLUMBERG, J. COX, FALCO, KAHL (*Chairman*), KERR

MATTHEWS, McCLEARY, MRUCK, ONION, RYON

Associate Professors: BOLES, ESSLINGER, JOCHENS, LAREW, PIOTROWSKI, RIVERS,

F. SANDERS, SCHOLNICK, VAN OSDELL

Assistant Professors: HIRSCHMANN, D. MARTIN, McWILLIAMS, NZEADIBE, SCARPACI, SLADEK, WHITMAN

Instructor: ELDRIDGE

The Department offers a major to encourage the student to explore in some depth the study of history. Such investigation, performed well, leads to an appreciation of the structure and function of the discipline, prepares the student for graduate work, and offers excellent background for many careers, particularly teaching and certain types of government service. The student is expected to take correlative courses which broaden his academic background and offer valuable insights into his major subject. The Department of History also strongly recommends the completion of two years of a foreign language.

The Department offers an honors program in history. Eligibility requirements and rules governing the college honors program are described elsewhere in this Bulletin. Students interested in the history honors program should consult their advisers and the Chairman of the Department.

Requirements for the Major

Thirty-six credit hours are required for a major in history, eighteen of which must be 40.145, 40.146; and six hours from the Western Civilization series (40.262, 40.263 or 40.264); three hours from 40.290, 40.490, 40.498 (once a student has reached senior standing he is not eligible to take 290 and must choose from 490 or 498); and three hours in Asian, African or Latin American history. At least twelve hours must be in upper division courses. Further details about requirements and policies concerning the major may be obtained in the Department office. Majors should register with the Department and select an academic adviser during the second semester of the freshman year or at the beginning of the sophomore year.

HISTORY COURSES (HIST)

Lower Division —Undergraduate

40.109 (109) INTRODUCTION TO THE CIVILIZATION OF THE INDIAN SUBCONTINENT (3) The development of the civilization of South Asia with emphasis on the rise of British rule and its replacement by the republics of Pakistan, India and Ceylon.

40.110 (110) INTRODUCTION TO EAST ASIAN CIVILIZATION: CHINA AND JAPAN (3) An outline of the development of the civilizations of China and Japan, with emphasis on principal cultural and political themes.

40.121 (321) LATIN AMERICA, COLONIAL PERIOD (3) The political, economic, and social developments in Portuguese and Spanish America from the pre-Columbian period to the movements for independence.

40.122 (322) LATIN AMERICA, NATIONAL PERIOD (3) The struggle for political, economic and social stability, international relations and cultural patterns in the develop-

ment of Independent Latin America in the nineteenth and twentieth centuries.

40.133 (001) THE AFRICAN WORLD I (3) A multi-disciplinary approach to the study of African people from about 4500 B.C. to the fifteenth century.

40.134 (002) THE AFRICAN WORLD II (3) A multi-disciplinary approach to the study of African people south of the Sahara from the fifteenth century to the present.

40.145 (221) HISTORY OF THE UNITED STATES I (3) Political, economic, social, and cultural forces which shaped the pattern of life in the United States from the founding of the colonies to 1865.

40.146 (22) HISTORY OF THE UNITED STATES II (3) Continuation of 40.145 from 1865 to the present.

40.201 (303) SURVEY OF ENGLISH HISTORY TO 1783 (3) Evolution of the political, legal,

social, economic, and cultural institutions of England and the spread of the Empire overseas. The triumph of Parliament over the monarchy and the development of individual rights of Englishmen.

40.202 (304) BRITISH HISTORY SINCE 1783 (3) Struggle against France, the Industrial Revolution, and the rise of the bourgeoisie to political control. The spread of empire, the symbolism of the Victorian era, and the evolution of democratic processes.

40.262 (262) HISTORY OF WESTERN CIVILIZATION I (3) Political, social, economic, and intellectual forces which shaped the pattern of Near Eastern and European life from the

Stone Ages through the decline of the Roman Empire.

40.263 (121) HISTORY OF WESTERN CIVILIZATION II (3) Political, social, economic, and intellectual forces which shaped the pattern of western life from post-Roman times through the seventeenth century.

40.264 (122) HISTORY OF WESTERN CIVILIZATION III (3) Political, social, economic, and intellectual forces which shaped the pattern of western life from the seventeenth century to the present.

40.290 (290) INTRODUCTION TO HISTORICAL STUDY (3) Survey of historical writings, the theory of history, introduction to research.

Upper Division — Undergraduate and Graduate

40.301 (301) ANCIENT NEAR EASTERN CIVILIZATIONS (3) The civilizations of Mesopotamia and Egypt and the peripheral developments in Syria-Palestine and Asia Minor. Prerequisite: 40.262 or consent of the instructor.

40.302 (302) CLASSICAL CIVILIZATIONS (3) The civilizations of Greece and Republican Rome with emphasis on their comparative developments to 30 B.C. Prerequisite: 40.262 or consent of the instructor.

40.303 (303) HELLENISTIC CIVILIZATION (3) The civilization that arose in the Mediterranean Basin after the conquests of Alexander and the Roman Empire within this context. Prerequisite: 40.262 or consent of the instructor.

40.309 (309) HISTORY OF EAST ASIA UNTIL THE SEVENTEENTH CENTURY (3) The historical development of the civilizations of China, Japan, and Korea prior to the intrusion by the Western powers, with special emphasis on the evolution of the Confucian culture of China. Prerequisite: 40.110 or consent of the instructor.

40.310 (310) HISTORY OF EAST ASIA SINCE 1600 (3) A study of the historical development of China, Japan, and Korea in the past three centuries focusing on their respective responses to the Western World. Prerequisites: 40.110, or 40.309 or consent of the instructor.

40.311 (367) HISTORY OF INDIA TO 1750 (3) A survey of the history and culture of the Indian subcontinent from prehistoric times to the beginning of the British Raj. Prerequisite: Six hours of history or consent of the instructor.

40.312 (368) HISTORY OF MODERN INDIA AND PAKISTAN (3) The history of the Indian subcontinent since 1750, stressing the rise of British power, the colonial experience, the development of nationalist movements, and the problems of statehood in present-day India, Pakistan, Ceylon, and Nepal. Prerequisite: Six hours of history or consent of the instructor.

40.313 (313) HISTORY OF MODERN SOUTHEAST ASIA (3) The development of Burma, Thailand, Malaysia, Indonesia, Cambodia, Vietnam, and the Philippines since 1500, with emphasis on the colonial experience and development of modern nationhood. Prerequisite: Six hours of history or consent of the instructor.

40.316 (459) CHINESE HISTORY SINCE 1800 (3) China from the beginnings of the Western penetration through the Nationalist and Communist revolutions of the twentieth century. Prerequisite: 40.110 and 40.264 or consent of the instructor.

40.317 (317) HISTORY OF MODERN JAPAN (3) The political, economic, and cultural aspects of Japan's rapid modernization from the mid-nineteenth century and her subsequent expansion, defeat, and recovery. Prerequisite: Nine hours of history to include either 40.110 or 40.310 or consent of the instructor.

40.321 (321) HISTORY OF MEXICO: PRE-COLUMBIAN AND COLONIAL (3) The political, economic, social, and cultural developments from early Pre-Columbian civilizations to the movement for independence. Prerequisite: Six hours of lower division history.

40.322 (322) HISTORY OF MEXICO: NATIONAL PERIOD (3) The political, economic, social, and cultural developments from Independence to the present. Prerequisite: Six hours of lower division history.

40.327 (327) SOCIAL AND INTELLECTUAL HISTORY OF LATIN AMERICA (3) A study of the impact of ideas on the organization of Latin American society in different epochs. Prerequisites: 40.121, 40.122 or consent of the instructor.

40.333 (430) SUB-SAHARAN AFRICA (3) Selected aspects of the development of African cultures, emphasizing changing assumptions and interpretations and the contributions of other disciplines to the reconstruction of Africa's past. Prerequisite: Six hours of history, or three hours of history and three hours of anthropology, archeology, linguistics, or political science; or consent of the instructor.

- 40.334 (334) HISTORY OF WEST AFRICA, 1500-1885 (3) The cultural, social, economic, and political institutions of the West African people from 1500 to 1885 with emphasis on the contributions made to African history by the Ashanti, the Old Oyo, the Dahomey, and the Bini. Prerequisite: 40.133 or 40.134 or 80.207 or consent of the instructor.
- 40.335 (335) A HISTORY OF CONTEMPORARY AFRICA (3) The political, economic, cultural, and intellectual forces which shaped the lives of the African people since World War II. Prerequisite: 40.133 or 40.134 or 40.264.
- 40.345 (345) THE AMERICAN COLONIES: 1492-1763 (3) Founding and the political, economic, and social development of the American colonies. Prerequisite: 40.145, or 40.263 or consent of the instructor.
- 40.346 (340) THE AMERICAN REVOLUTIONARY PERIOD: 1763-1789 (3) From the end of the Seven Years' War to the ratification of the Constitution. Prerequisite: 40.145 or 40.263 or consent of the instructor.
- 40.347 (346) THE EARLY NATIONAL PERIOD (3) The United States from the Constitutional Convention to the Election of 1820. The Federalist Decade and the Jeffersonian Era. Prerequisite: 40.145.
- 40.348 (347) THE JACKSONIAN ERA (3) The United States from 1815 to 1845; political, social, and economic currents of the period. Prerequisite: 40.145.
- 40.349 (348) CIVIL WAR AND RECONSTRUCTION I (3) Sectional crises leading to the Civil War; political, economic, and social issues arising during the years of the war and Reconstruction. First semester to the end of the Civil War. Prerequisite: 40.145 and 40.146.
- 40.350 (349) CIVIL WAR AND RECONSTRUCTION II (3) Continuation of 40.349 from the election of Lincoln to 1877. Prerequisite: 40.145 and 40.146.
- 40.351 (337) THE GILDED AGE (3) History of the United States from 1877 to 1892 with emphasis on the political, economic, and social questions of the era. Prerequisite: 40.145 and 40.146.
- 40.352 (338) THE POPULIST-PROGRESSIVE ERA (3) History of the United States from 1892-1920 with emphasis on the political, economic, and social questions of the era. Prerequisite: 40.145 and 40.146.
- 40.359 (350) RECENT AMERICAN HISTORY, 1920-1945 (3) History of the United States from the 1920's through World War II, with emphasis on the presidential years of Franklin D. Roosevelt. Prerequisite: 40.146.
- 40.360 (351) RECENT AMERICAN HISTORY SINCE 1945 (3) History of the United States from World War II to the present, including political, social, economic, and diplomatic developments. Prerequisite: 40.146.
- 40.361 (413) AMERICAN INTELLECTUAL HISTORY TO 1859 (3) Main issues in American thought from the colonial period to the publication of Darwin's *The Origin of Species*. Emphasis on religious thought, political theory, and ideas in literature. Prerequisite: 40.145 or 30.211.
- 40.362 (414) AMERICAN INTELLECTUAL HISTORY SINCE 1859 (3) Main issues in American thought from the publication of Darwin's *The Origin of Species* to contemporary times. Emphasis on religious thought, social theory, ideas in literature and philosophy. Prerequisite: 40.146 or 30.212.
- 40.363 (415) SOCIAL HISTORY OF THE UNITED STATES I (3) History of American life from the seventeenth century to the present, focusing on problems relating to social structure, popular culture, religious and educational institutions. First semester to 1865. Prerequisite: 40.145.
- 40.364 (416) SOCIAL HISTORY OF THE UNITED STATES II (3) Continuation of 40.363 from 1865 to the present. Prerequisite: 40.146.
- 40.365 (333) ECONOMIC HISTORY OF THE UNITED STATES I (3) American economic development with an emphasis upon trends and problems of contemporary importance, colonial times to 1865. Prerequisite: 40.145.
- 40.366 (334) ECONOMIC HISTORY OF THE UNITED STATES II (3) Continuation of 40.365 from 1865 to the present. Prerequisite: 40.146.
- 40.367 (402) CONSTITUTIONAL HISTORY OF THE UNITED STATES I (3) Development of American constitutionalism in theory and practice to 1868. Prerequisite: 40.145.
- 40.368 (403) CONSTITUTIONAL HISTORY OF THE UNITED STATES II (3) Continuation of 40.367 since 1868. Prerequisite: 40.146.
- 40.369 (451) DIPLOMATIC HISTORY OF THE UNITED STATES TO 1900 (3) Evolution of the American national interest in foreign relations with Europe, Latin America, and the Far East from colonial times to 1900. Emphasis upon the changing character and role of objectives, policies, commitments, and forces. Prerequisite: 40.145 and 40.146.
- 40.370 (452) DIPLOMATIC HISTORY OF THE UNITED STATES SINCE 1900 (3) Continuation of 40.369 to the present with added interest in the emergence of the United States as a major world power. The role of the United States in modern warfare, world wide economic and financial affairs, overseas expansion, the diplomatic impact of conflict in ideologies, and current international crisis. Prerequisite: 40.145 and 40.146.
- 40.371 (371) UNITED STATES RELIGIOUS HISTORY I (3) The interactions between religion, society, reform, and education in the American past. Emphasis on how religious ideals have shaped American institutions and character. First semester to 1865. Prerequisite: 40.145.

- 40.372 (372) UNITED STATES RELIGIOUS HISTORY II (3) Continuation of 40.371 since 1865. Prerequisite: 40.146.
- 40.373 (373) THE AMERICAN FRONTIER I (3) The westward movement of the American people and the effect of the frontier process on the social, economic, and political institutions of the United States and on the attitudes of the American people to 1840. Prerequisite: 40.145.
- 40.374 (374) THE AMERICAN FRONTIER II (3) Continuation of 40.373 since 1840. Prerequisite: 40.146.
- 40.375 (405) THE CITY IN AMERICAN HISTORY (3) The development of the city and its impact on American social, cultural, intellectual, political, and economic life. Prerequisite: 40.145, 40.146 or two of the following: 34.391, 80.344, 68.305 or consent of the instructor.
- 40.377 (407) THE IMMIGRANT IN AMERICAN HISTORY (3) The history of the immigrant experience in America from the colonial period to the present. Emphasis on migration patterns, receptivity of native society, assimilation and acculturation processes. Prerequisite: 40.145 and 40.146.
- 40.379 (379) INDIAN-WHITE RELATIONS IN AMERICAN HISTORY (3) The interplay of societal attitudes, cultural beliefs, and official government policy and their impact on the Indian population of North America, from 1492 to the present. Prerequisite: Three hours of American history.
- 40.381 (417) HISTORY OF BLACK AMERICANS (3) History of Americans of African ancestry from their West African background to the present. Emphasis on black Americans' thought, activities, organizations, and their role in developing America. Prerequisite: 40.145 and 40.146.
- 40.391 (418) HISTORY OF CANADA (3) Canadian history with emphasis on the period since 1867. Particular attention will be given to the problems of cultural dualism and confederation. Prerequisite: 40.145, 40.146, 40.263, and 40.264.
- 40.397 (320) HISTORY AND GEOGRAPHY OF MARYLAND (3) Political, social, and economic development of the state and its relations to major events in the development of the nation. Natural resources; regional land use; industrial development, particularly in the Baltimore area. Field trips. \$15.00 field trip fee payable by the time of registration. Prerequisite: 40.145, 40.146, 34.101, and 34.102.
- 40.400 (420) SEMINAR IN AMERICAN HISTORY (3) Reading and research dealing with a phase of history to be selected by the instructor; considerable attention to sources and historiography. Prerequisite: Consent of the instructor and fifteen hours of history including either 40.290 or 40.490 or 40.498.
- 40.401 (357) MEDIEVAL CIVILIZATION I (3) The principal currents of political, social, intellectual, and artistic developments in medieval Europe from the early middle ages to about 1050. Prerequisite: 40.263.
- 40.402 (358) MEDIEVAL CIVILIZATION II (3) Continuation of 40.401—the high middle ages, 1050 to 1350. Prerequisite: 40.263.
- 40.403 (362) EUROPE IN TRANSITION 1300-1530 (3) Political, economic, social, and cultural changes in late medieval and Renaissance Europe. Prerequisite: 40.262 and 40.263.
- 40.404 (363) THE REFORMATION (3) Religious, political, economic, and social changes in Reformation and Catholic (Counter-) Reformation Europe. Prerequisite: 40.262 and 40.263.
- 40.405 (363) EUROPE: 1648-1815 (3) European state system and expansion of European civilization; intellectual growth and class relationships culminating in the French Revolution and Napoleon. Prerequisite: 40.263 and 40.264.
- 40.406 (364) EUROPE: 1815-1914 (3) Major economic, political, social, and intellectual currents of the period. The effects of the industrial revolution, the development of nationalism and imperialism, and the origins of World War I. Prerequisite: 40.263 and 40.264.
- 40.407 (463) EUROPE: 1914-1939 (3) Events leading to World War I, the conflict, and the peace which followed. The rise of conflicting political ideologies and the road to World War II. Prerequisite: 40.263 and 40.264.
- 40.408 (464) EUROPE SINCE 1939 (3) World War II—diplomacy, strategy, and results. The economic, social, and political recovery of post-War Europe and the development of new alliance structures. Prerequisite: 40.263 and 40.264.
- 40.413 (425) EUROPEAN MILITARY HISTORY SINCE 1815 (3) The major wars, and inter-war military developments of post-Napoleonic Europe seen in the context of diplomatic, economic, and technological history. Prerequisite: 40.264 or consent of the instructor.
- 40.415 (426) DIPLOMATIC HISTORY OF EUROPE: 1815-1939 (3) A study in depth, with emphasis upon specific diplomatic crises. Prerequisite: 40.264.
- 40.417 (328) ECONOMIC HISTORY OF EUROPE I (3) The modern economic institutions of Western Europe. The commercial revolution, the industrial revolution, and the age of mass production and technology to 1750. Prerequisite: 40.263.
- 40.418 (329) ECONOMIC HISTORY OF EUROPE II (3) Continuation of 40.417 since 1750. Prerequisite: 40.264.

- 40.421 (470) **BRITAIN IN THE TWENTIETH CENTURY** (3) The role of Britain, the Commonwealth, and the Empire. Social reform and World War I. Efforts to recover economic equilibrium. World War II. Decline of the Empire and Socialism. Prerequisite: 40.263 and 40.264.
- 40.431 (428) **FRANCE: 1763-1871** (3) Old Regime and the impact of successive revolutions upon French society. Emphasis upon the role of France in the growth of European liberalism and nationalism. Prerequisite: 40.264.
- 40.441 (460) **MODERN GERMANY: 1871-1945** (3) Brief topical analysis of the nineteenth century background. Concentration on the Bismarckian Empire, Weimar Republic and the Third Reich, emphasizing the interrelationships between internal developments and Germany's role in Europe and the world. Prerequisite: 40.264.
- 40.451 (423) **RUSSIA TO 1894** (3) From Kievan Rus to the reign of Nicholas II. Prerequisite: 40.263 and 40.264 or consent of the instructor.
- 40.452 (424) **RUSSIA SOVIET UNION SINCE 1894** (3) From the reign of Nicholas II to the present. Prerequisite: 40.263 and 40.264 or consent of the instructor.
- 40.461 (419) **SEMINAR IN EUROPEAN HISTORY** (3) Reading and research dealing with a phase of history to be selected by the instructor; considerable attention to sources and historiography. Prerequisite: Consent of the instructor and fifteen hours of history including either 40.290 or 40.490 or 40.498.
- 40.463 (433) **INTELLECTUAL HISTORY OF WESTERN CIVILIZATION I** (3) Religious and scientific thought in the context of broad historical trends; social theory also considered. Medieval, Renaissance, and Reformation history covered briefly; emphasis on seventeenth and eighteenth centuries. Prerequisite: 40.264 or consent of the instructor.
- 40.464 (434) **INTELLECTUAL HISTORY OF WESTERN CIVILIZATION II** (3) Continuation of 40.463 from 1800 to the present. Prerequisite: 40.264 or consent of the instructor.
- 40.477 (435) **MODERN WESTERN COLONIALISM** (3) Expansion of Western culture and institutions with particular reference to their effects on the peoples of Asia and Africa in the period since 1870. Prerequisite: 40.264.
- 40.479 (437) **A HISTORY OF DIPLOMACY** (3) Evolution from its origins to the present with emphasis on the modern period. Historic changes which shifting ideologies and new technologies have wrought in the role of the diplomat. Prerequisite: 40.263 and 40.264.
- 40.483 (483) **MODERN JEWISH HISTORY TO 1948** (3) The political, cultural, and socio-economic experiences of World Jewry with emphasis on developments since the French Revolution. Prerequisite: 40.264.
- 40.490 (490) **INTERPRETIVE PROBLEMS IN HISTORY** (3) An in-depth study of historical interpretations of selected topics. Prerequisite: Twelve hours of history.
- 40.491 (214, 215, 216, 217) **BIOGRAPHICAL STUDIES IN HISTORY** (3) A study of selected historical figures who have shaped or reflected the past. Figures to be selected by the instructor. Prerequisite: Six hours of history.
- 40.492 (492) **HISTORICAL THEMES** (3) A study through lectures and discussions of a historical topic selected by the instructor. Prerequisite: Six hours of history appropriate to the topic as determined by the instructor.
- 40.493 (493) **PRACTICUM (2-6)** Experience designed to combine the research and content of history with work in historical libraries, museums, archival depositories, and similar agencies. No more than six hours to be earned with any one agency. Prerequisite: Twenty-seven hours of history courses and consent of the Department Chairman.
- 40.494 (490) **TRAVEL AND STUDY (3-6)** Countries and topics to be selected by the Departments and instructors sponsoring the program. For complete information, write the Chairman of the Department early in the fall of the academic year preceding the summer of intended study. Prerequisite: Upper division status and consent of the instructor.
- 40.495 (495) **SEMINAR IN COMPARATIVE STUDIES** (3) Reading and research in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific topics, problems, or developments selected by the instructor(s). Prerequisite: Consent of the instructor and fifteen hours of history including either 40.290 or 40.490 or 40.498, or six hours of history and a research methods course and six additional hours of the related discipline.
- 40.496 (496) **COLLOQUIUM** (3) Group discussion of reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with broad periods, topics, problems or comparative developments selected by the instructor(s). Prerequisite: Consent of the instructor and fifteen hours of history or nine hours of history and six hours of the related discipline.
- 40.497 (485) **DIRECTED READING (2-4)** Independent reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific periods, topics, problems or comparative developments selected by the student in consultation with the instructor(s). Prerequisite: Fifteen hours of history or nine hours of history and six hours of the related discipline and a minimum average of 3.00 of history and the related discipline and consent of the Department Chairman.

40.498 (498) PHILOSOPHY OF HISTORY (3) Metaphysical foundations of historical knowledge (epistemology) and metaphysical interpretations of the course of history. "Scientific" history, history of historical metaphysics. Prerequisite: Twelve hours of history or six hours of history and 6 hours of philosophy.

40.499 SENIOR THESIS (2-4) Research and the writing of a thesis, to be directed by a faculty member in a chosen area of specialization. Prerequisite: Admission to Departmental Honors Program.

Graduate Division

40.599 (599) SEMINAR IN UNITED STATES HISTORY TO 1865 (3) Research dealing with a phase of United States history to 1865 to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.600 (600) SEMINAR IN UNITED STATES HISTORY SINCE 1865 (3) Research dealing with a phase of United States history since 1865 to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.661 (661) SEMINAR IN NINETEENTH CENTURY EUROPEAN HISTORY (3) Research dealing with a phase of nineteenth century

European history to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.662 (662) SEMINAR IN TWENTIETH CENTURY EUROPEAN HISTORY (3) Research dealing with a phase of twentieth century European history to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.697 (697) DIRECTED READING IN HISTORY (2-4) Independent reading in areas of history selected by the instructor and the student. Prerequisite: Graduate standing and consent of the instructor and Department Chairman.

International Studies

Coordinator: ERIC A. BELGRAD

I. Purpose:

To provide an interdisciplinary system of courses which will lead to an arts and science major in international studies, with opportunities to specialize in foreign areas. The major program is designed to prepare students for graduate studies, for careers in government foreign service and other government agencies, and in commercial and industrial fields where foreign area specialists are required.

II. Organization and Administration:

The program is administered by a Committee composed of one representative from each of the following disciplines; economics, geography, history, political science and sociology. The current members of the Committee who will also serve as advisers to the students majoring in international studies are: Pritam T. Merani, Professor of Political Science (Chairman of the Committee); Arnold Blumberg, Professor of History; David Firman, Professor of Geography; Abolmajd Hojjati, Professor of Sociology; and Henry N. Sanborn, Professor of Economics.

III. Scope:

All students majoring in international studies will complete 33 credit hours of required courses (indicated under IV A) and 27 credit hours of related electives under one of the two plans listed below:

Plan A — Functional Specialization (Non-Area)

Under this plan, students will complete 27 elective credit hours of courses related to international affairs without concentration on any geographical area.

Plan B — Area Specialization

This plan is designed to focus on important world regions. Students will complete 27 credit hours in related elective courses which concern a particular nation or region.

IV. Major Requirements:

A. Required Courses for the major are as follows:

1. *Economics*9 credit hours
24.101-102 Economic Principles and Problems6 credit hours
24.327 International Economics3 credit hours
2. *Geography*6 credit hours
34.101-102 Elements of Geography3 credit hours
34.381 Political Geography3 credit hours
3. *History*6 credit hours
40.263-264 History of Western Civilization ...6 credit hours
OR 40.145-146 History of the United States6 credit hours
4. *Political Science*9 credit hours
68.303 Theory of International Politics3 credit hours
68.337 Comparative Governments of Foreign Powers
OR3 credit hours
68.338 Comparative Governments of Foreign Powers
OR3 credit hours
68.427 Political Theory3 credit hours

5. *Sociology* -----3 credit hours

80.101 Introduction to Sociology -----3 credit hours

OR 80.105 Introduction to Anthropology -----3 credit hours

B. Related Electives -----27 credit hours

These may be selected from any department which offers related electives, i.e., sociology, English, literature, languages, art, philosophy, etc. Such courses will be selected by students in consultations with advisers, in order to broaden and/or specialize as desired under Plans A or B.

C. Foreign Language.

A foreign language is required for the B.A. degree. Students must select one of several languages in relation to their foreign area or functional interests as determined by their advisers. A student should be prepared to demonstrate a workable reading knowledge of that language. This requirement may be met by completing the intermediate course or equivalent of a modern foreign language.

V. *Transfer Students:*

Transfer Students must take a minimum of 18 credits of upper division courses in International Studies at Towson State to fulfill requirements for the major.

Mathematics

Professors: PERREAULT, VOLPEL

Associate Professors: BECKY, DAVIS, HANSON, HASTE, HORAK, SIEGEL,
ZIMMERMAN (*Chairman*), ZIPP

Assistant Professors: CHEN, CHINN, DUSTIRA, FISCHER, GRAVES, JONES, KIM,
ILGENFRITZ, KAPLON, LIDTKE, RIGGLEMAN, RUTENBERGS, SMITH,
SWENSEN, WAGNER

Instructors: JEFFERS, NEUBERT, ROSE

The mathematics curriculum provides opportunities for students to do abstract reasoning applicable to many scientific or academic areas, to survey the field of mathematics, to study the applications of the discipline, to prepare for graduate work in mathematics, to become teachers of mathematics in the elementary and secondary schools, and to enter fields of industry and government requiring mathematics.

Any student submitting mathematics credits which are more than ten years old at the time the student is admitted or readmitted, may be asked, after the records are reviewed by the department chairman, to repeat the courses or to substitute new ones.

All students in the elementary education program or the early childhood education program are required to take both 50.204 and 50.205 or equivalent.

Placement

Each student should consult those portions of this catalog describing his major and minor programs to see whether specific mathematics courses are required or recommended.

It is recommended that those students having at least 1½ years of high school algebra, ½ year of trigonometry and ½ year of analytic geometry take the Mathematics Placement Test, which will cover the above subjects. Call 823-7500, ext. 296 by May 1st to register for this test. (It is expected that some, but not necessarily all, students who have had the above courses will enroll in Calculus I as an initial mathematics course at Towson). Those taking the Placement Test will be notified of the results and will be advised regarding placement in a mathematics course prior to registration.

Students should enroll in that Mathematics course for which they have the necessary prerequisites, but for which they are not over-prepared.

50.111 and 50.211 are courses specifically designed for students of business, economics, psychology and other social sciences.

50.204 and 50.205 may be used to satisfy the group II general education requirements for elementary and early childhood education majors.

For other majors, any mathematics or computer science course (with the exception of 50.010, 50.204, 50.205, 50.321 and 50.323) may be used to satisfy the group III required.

Mathematics Minors

All mathematics minors are required to take 50.261, 50.273, 50.274 and enough mathematics courses above the 100 level, excluding 50.201, 50.205, 50.211, 50.321, 50.323 and 50.423, to make a total of 20 semester hours. At least one upper-division course, excluding computer science courses, must be taken; and at most one computer science course may be counted toward the minor. The program of the minor should be approved by the student's mathematics department advisor. (A minor in mathematics enables a student to meet the subject-matter requirements for a Maryland secondary school teacher's certificate to teach mathematics.)

Students interested in the option, Elementary Education with Mathematics Minor should consult the Education section of the Bulletin. A student in this program must take 50.204 (Fundamental Concepts of Arithmetic) among the twenty required credit hours. A student in this program will be advised by the chairman, Elementary Education. In addition, the student should seek advice in the Mathematics Department.

Mathematics Majors, Secondary Education Program

All mathematics majors who plan to be secondary school teachers are required to take 50.261, 50.273, 50.274, 50.353, 50.361 plus enough mathematics courses at the 300 and 400 level to make a total of 30 semester hours in mathematics. One of the Computer Science courses, 23.337 or 23.338, may be counted in these 30 hours, but not both. Physics 66.211 and 66.212, or 66.221 and 66.222 are also required.

All students should do their student teaching in their senior year. Any student wishing to deviate from this policy must obtain permission from the Department of Mathematics, prior to the beginning of his junior year.

Secondary education mathematics majors are required to take 50.423 and at least three upper-division courses of their mathematics major program at Towson State College.

Students should consult the Education Department section in this Bulletin for additional course requirements for prospective secondary school teachers.

Mathematics Majors, Arts and Science Program

All mathematics majors in an arts and science program (therefore not necessarily prospective teachers of mathematics) are required to take 50.261, 50.273, 50.274, 50.361, 50.365, 50.373, 50.473 and 50.474 plus enough 300 and 400 level mathematics courses to make a total of 36 semester hours in mathematics. One of the Computer Science courses, 23.337 or 23.338, may be counted in these 36 hours, but not both. Physics 66.211 and 66.212, or 66.221 and 66.222, and computer Science 23.235 are also required.

Arts and science mathematics majors are required to take at least four upper-division courses of their mathematics major programs at Towson State College.

Mathematics Majors and Minors

Mathematics majors or minors who receive a grade of D in a 100 level course prerequisite to calculus must repeat the course no later than concurrent with calculus.

Mathematics majors or minors must attain a grade of at least C in any 200, 300 or 400 level course used as a prerequisite. Unless otherwise noted, prerequisites must be satisfied prior to taking a course.

Mathematics Courses

A note on the numbering system: The left digit of the course number indicates the level of the content. The middle digit of the course number indicates the area of the content: zero-general; 1-service; 2-mathematics education; 3-probability and statistics, numerical analysis; 5-geometry; 6-algebra; 7-analysis; 9-readings, special topics, and seminars in mathematics.

Service Division

50.010 INTERMEDIATE ALGEBRA (0) Real number system, solutions of equations and inequalities in one and two variables, solutions of quadratic equations, exponents, rad-

icals, functions, polynomial algebra, progressions and complex numbers. **Prerequisite:** One year high school algebra.

Lower Division — Undergraduate

- 50.111 ALGEBRA FOR APPLICATIONS (3)** Intended primarily for students in business, economics, psychology and the social sciences. Included is an introduction to the real number system, inequalities, graphing of algebraic relations and basic algebraic techniques. The emphasis will be on applications of linear equations, matrices, determinants, linear programming and simple games. Prerequisites: Two years high school algebra or 50.010. (Not open to mathematics majors or minors.)
- 50.115 MATHEMATICS I (3)** Real numbers and sets, equations and inequalities, functions (including logarithmic and exponential functions) and trigonometry. Prerequisites: High school geometry and two years of high school algebra; or 50.010.
- 50.116 MATHEMATICS II (3)** Complex numbers; determinants; and analytic geometry of the line, plane, conics, and three-space surfaces. Prerequisite: 50.115 or two years high school algebra and $\frac{1}{2}$ year trigonometry.
- 50.119 PRE-CALCULUS (3)** Real numbers, functions (including exponential, logarithmic, trigonometric and circular functions), matrices and determinants, analytic geometry using vectors in two- and three-space. Prerequisite: $1\frac{1}{2}$ -2 years algebra, $\frac{1}{2}$ year trigonometry and $\frac{1}{2}$ year analytic geometry.
- 50.201 ELEMENTS OF MATHEMATICS (3)** Topics selected from systems of numeration, logic, sets, algebraic properties of real numbers, abstract algebraic structures, probability, and geometry. Prerequisite: One year of high school algebra. (Not open to mathematics majors, mathematics minors, early childhood education or elementary education students or any students who have received credit for any college level mathematics course.)
- 50.204 FUNDAMENTAL CONCEPTS OF ARITHMETIC (3)** Sets, systems of numeration, principles underlying fundamental operations, and development of the number system through rational numbers. Prerequisite: One year of high school algebra. (Required of all early childhood education and elementary education students. Satisfies mathematics requirement for these students. Not open to others.)
- 50.205 GENERAL COLLEGE MATHEMATICS (3)** Elements of algebra and geometry, real numbers, abstract systems, logic, probability and measurement. Prerequisite: 50.204. (Required of all early childhood education and elementary education students. Not open to others.)
- 50.209 MATHEMATICS OF FINANCE (3)** Compound interest and discount, amortization, sinking funds, annuities, and elements of insurance. Prerequisite: 50.111 or 50.115 or 50.119 or equivalent. (No credit toward a mathematics major.)
- 50.211 CALCULUS FOR APPLICATIONS (3)** Intended primarily for students in business, economics, psychology and the social sciences. Elements of differential and integral calculus from an intuitive standpoint with emphasis on the use of calculus in the above fields. Exponential and logarithmic functions, sequences and series included. Prerequisite: 50.111 or 50.115 or 50.116 or 50.119. (Not open to mathematics majors or minors.)
- 50.231 BASIC STATISTICS (3)** Frequency distributions with emphasis on binomial and normal distributions, percentiles, measures of central tendency and variability, sampling theory, tests of hypotheses, regression analysis, correlations, and analysis of variance or time series. Emphasis will be placed on practical applications of statistics. Prerequisite: 50.111 or 50.115 or equivalent. (Not open to mathematics majors.)
- 50.251 GRAPH THEORY (3)** A course designed as a general education mathematics course for students with an interest in the social sciences. Also of interest to elementary education majors. Covers concepts and uses of graph theory. Applications from sociology, economics, genetics, games, etc. Prerequisite: Three years high school mathematics or any college mathematics course or consent of instructor.
- 50.261 FUNDAMENTALS OF MATHEMATICS (3)** Logic, sets and functions, cardinality, introduction to algebraic structures, and mathematical induction. Prerequisite: 50.116 or 50.119 or consent of instructor.
- 50.273 CALCULUS I (4)** Functions, limits and continuity; introduction to sequences; differentiation of algebraic, inverse, and transcendental functions; mean value theorem; differentials; completeness property of the real numbers; application. Prerequisite: 50.116 or 50.119 or Calculus course in high school or adequate score on Placement Test.
- 50.274 CALCULUS II (4)** Definite and indefinite integrals, formal integration and applications; indeterminate forms; sequences and series of numbers, and power series. Prerequisite: 50.273.

Upper Division — Undergraduate and Graduate

Upper division courses not marked with an asterisk (*) may be submitted for mathematics credit to the graduate school for the master's degree in education provided they have not been submitted for undergraduate credit.

***50.001 STATISTICS — A PRACTICAL APPROACH (4)** The theory and practice of basic statistical analysis and inference with emphasis on analyzing and solving real problems using statistics. Descriptive sta-

- tistics, introduction to probability, sampling distributions, estimation, hypothesis testing, regression, correlation, nonparametric techniques and analysis of variance. Computer programming will be incorporated throughout the course. Prior knowledge of programming is not necessary. This is an experimental course. Prerequisite: 50.274, which may be taken concurrently. (Not open to students who have taken 50.332.)
- 50.002 MATHEMATICAL MODELS (3) Consideration of some mathematical problems in sociology, psychology, economics, management science and ecology and developing appropriate mathematical models and techniques to solve them using ordinary differential equations and convexity. Prerequisite: 50.274 or consent of instructor.
- *50.321 TEACHING MATHEMATICS IN EARLY CHILDHOOD EDUCATION (2 or 3) Materials of instruction and methods of presentation with emphasis on the discovery approach. Prerequisites: 50.204 and 50.205. (No credit toward a mathematics major or minor.)
- *50.323 TEACHING MATHEMATICS IN ELEMENTARY SCHOOL (2 or 3) Nature of instruction, organization of units of instruction, provisions for developing understandings, new programs and research findings, and techniques of evaluation. Required of all elementary education majors. Prerequisites: 50.204 and 50.205. (No credit toward a mathematics major or minor.)
- 50.325 TEACHING MATHEMATICS IN THE MIDDLE SCHOOL (3) Philosophy, learning, teaching models, specific methods approaches, planning for teaching and learning, and applicable contemporary curricula in the middle school mathematics curriculum. Prerequisites: 50.261 and 50.273 and approval of Instructor. (No credit toward a mathematics major or minor.)
- 50.331 PROBABILITY (3) Probability in sample spaces, discrete and continuous random variables, distribution theory, Tchebyshev's theorem, central limit theorem, expected values and moments. Prerequisite: 50.274, which may be taken concurrently.
- 50.332 MATHEMATICAL STATISTICS (3) Sample theory and distributions, point estimation, confidence intervals, tests of hypotheses, regression, correlation and analysis of variance. Prerequisite: 50.331. (Offered only in the spring semester of the academic year.)
- *50.351 ELEMENTS OF GEOMETRY (3) Designed to give the elementary education student additional background in geometry. Involves geometric definitions, vocabulary and techniques, constructions and scale drawings, and measurement of plane and space figures. Prerequisite: 50.205. (Not open to mathematics majors.)
- *50.353 ELEMENTARY GEOMETRY FROM AN ADVANCED STANDPOINT (3) Review of synthetic Euclidean geometry; non-Euclidean geometries; finite geometries and systems of axioms; classical theorems; elementary transformations. Prerequisites: 50.261 and 50.273. (No credit toward a mathematics major for arts and science students.)
- 50.357 COLLEGE GEOMETRY (3) Projective geometry, both synthetic and analytic, including duality; Desargues theorem, harmonic sequences, Pappus theorem, homogeneous coordinates, conics, polarities. Prerequisites: 50.261 and 50.273. (Offered only in the fall semester of the academic year.)
- 50.361 ALGEBRAIC STRUCTURES (4) Groups, rings, fields, integral domains, and polynomial rings. Prerequisite: 50.261.
- 50.365 LINEAR ALGEBRA (3) Matrices, vector spaces, determinants, systems of linear equations, linear transformations, characteristic vectors and values, canonical forms. Prerequisite: 50.361.
- 50.367 THEORY OF NUMBERS (3) Theory of prime numbers, the division algorithm, the fundamental theorem of arithmetic, polynomials, congruences, number theoretic functions. Prerequisite: 50.261.
- 50.373 CALCULUS III (4) Differential and integral calculus of functions of several variables; differential and integral calculus of vector valued functions, including the divergence and Stokes theorems; selected topics from Fourier series, Laplace transform, special functions and differential equations. Prerequisite: 50.274.
- 50.421 MATHEMATICS EDUCATION FOR IN-SERVICE ELEMENTARY SCHOOL TEACHERS (1-4) Selected topics in the teaching of elementary school mathematics. (Open only to in-service personnel in elementary education who have not had 50.204 or 50.205 or equivalent within the last five years. Graduate credit only with prior approval of advisor.)
- *50.423 TEACHING MATHEMATICS IN SECONDARY SCHOOLS (3) Objectives of mathematics instruction, examination of courses of study and textbooks, study of methods of teaching. Open only to students in the students in the student teaching block. Prerequisites: 50.353 and 50.361. (No credit toward a mathematics major or minor.)
- 50.427 READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (TBA) Directed study for the teacher of elementary school mathematics. Prerequisites: 50.321 or 50.323 and approval of Instructor. (No credit toward a mathematics major.)
- 50.429 READINGS IN MATHEMATICS EDUCATION FOR THE SECONDARY SCHOOL TEACHER (TBA) Directed study for the teacher of secondary school mathematics. Prerequisite: Consent of instructor. (No credit toward a mathematics major for arts and science students.)

- 50.435 NUMERICAL ANALYSIS I (3)** Error analysis, Interpolation, numerical differentiation and Integration, numerical solution of algebraic equations and of systems of algebraic equations. Prerequisites: 23.235 and 50.274. 23.235 may be taken concurrently. Offered only in the fall semester of the academic year.)
- 50.436 NUMERICAL ANALYSIS II (3)** Numerical solution of differential equations. Least squares and its applications, linear programming and extensions of the concepts of 50.435. Prerequisite: 50.435. (Offered only in the spring semester of the academic year.)
- 50.451 MATH RESEARCH IN GRAPH THEORY (3)** A course designed to give an advanced mathematics major the opportunity to do independent, significant research in a field of mathematics through graph theory. Topics may include Hamiltonian and Eulerian graphs, coloring graphs, planar and non-planar graphs, connectivity problems and isomorphic graphs. Prerequisite: Consent of instructor.
- 50.457 DIFFERENTIAL GEOMETRY I (3)** Curvatures of curves and surfaces in E_3 , geodesics, invariants, mappings and special surfaces. Prerequisite: 50.373.
- 50.458 DIFFERENTIAL GEOMETRY II (3)** Continuation of 50.457. Prerequisite: 50.457.
- 50.461 ADVANCED TOPICS IN ALGEBRA (3)** Extension of the concepts of 50.361. Prerequisite: 50.361. (Offered only in the fall semester of the academic year.)
- 50.462 HOMOLOGY THEORY (3)** Axioms and uniqueness of homology groups, singular homology theory, applications of the axioms, computations of homology groups. Prerequisite: Consent of instructor.
- 50.471 DIFFERENTIAL EQUATIONS (3)** Theory and application of linear ordinary differential equations. Solutions of non-linear ordinary differential equations of the first order. Prerequisite: 50.274.
- 50.473 ADVANCED CALCULUS I (3)** Dedekind cuts; Euclidean spaces; compact and connected sets, continuity, uniform continuity, limits, sequences and completeness in a metric space; Heine-Borel theorem; Weierstrass theorem; numerical sequences and series; differentiation, mean value theorem and differentiation of vector valued functions. Prerequisites: 50.261 and 50.274.
- 50.474 ADVANCED CALCULUS II (3)** Riemann-Stieltjes integral, sequences and series of functions, convergence and uniform convergence, Stone-Weierstrass theorem, and functions of several variables. Prerequisite: 50.473. (Offered only in the spring semester of the academic year.)
- 50.475 COMPLEX ANALYSIS (3)** Complex number system, analytic functions, Cauchy's integral theorem and integral formula, Taylor and Laurent series, isolated singularities, Cauchy's residue theorem and conformal mappings. Prerequisite: 50.373. (Offered only in the fall semester of the academic year.)
- 50.477 TOPOLOGY (3)** Basic concepts of point-set topology, separation axioms, compact and connected spaces, product and quotient spaces, convergence, continuity and homeomorphisms. Prerequisite: 50.473. (Offered only in the spring semester of the academic year.)
- 50.491 READINGS IN MATHEMATICS (TBA)** Independent reading in selected areas of mathematics. Prerequisite: Consent of instructor. (Open only to seniors.)

Graduate Division

- 50.501 HISTORY OF MATHEMATICS (3)** An historical survey of the classical roots of contemporary mathematics with selected topics chosen from number theory, geometry, analysis and algebra. Prerequisites: 50.274, 50.353 or 50.357, and 50.361.
- 50.521 SEMINAR IN TEACHING ARITHMETIC (3)** Analysis of new topics, techniques, and materials in arithmetic instruction. Prerequisite: 50.321 or 50.323. (No credit toward a mathematics major or minor.)
- 50.525 SEMINAR IN MATHEMATICS EDUCATION (3)** An investigation of recent curricula, methods, and materials in secondary school mathematics instruction. Prerequisite: 50.423 or equivalent.
- 50.553 TOPICS IN GEOMETRY (3)** Axiomatic development of Euclidean, elliptic and hyperbolic geometries; the study of the analytic plane, the sphere and the Poincaré model, as models for these axiomatic systems. Prerequisites: 50.274 and 50.361.

COMPUTER SCIENCE COURSES

- 23.211 INTRODUCTION TO DATA PROCESSING (3)** An introduction to the concepts of data processing; definitions, historical background, punched card systems, computer systems, basic concepts of programming, I/O devices, source data, operating systems and data communication. (No credit toward a mathematics major.)
- 23.212 COBOL PROGRAMMING (3)** Study of COBOL language with students writing, testing and debugging programs, using cards, tapes, and disks. Applications will be from business data processing, including payroll, accounting, inventory, file maintenance and simulation. Prerequisites: 23.211 and 16.201 or consent of instructor. (No credit toward a mathematics major.)

- 23.235 FUNDAMENTALS OF COMPUTING (3) A first course in computing to provide the student with the requisite knowledge and experience to use computers effectively in the solution of numeric and non-numeric problems. Two lecture hours and two laboratory hours. Prerequisite: Two years of high school algebra or equivalent. (No credit toward a mathematics major.)
- 23.313 PRACTICUM IN PERIPHERALS (3) A course limited to students preparing to teach data processing, giving practical experience with peripheral data processing equipment. Ten hours of laboratory per week in a data processing facility with varied supervised experiences. Evaluation by data processing facility supervisor and instructor. Prerequisite: 23.212. (No credit toward a mathematics major.)
- 23.315 SURVEY OF PROGRAMMING LANGUAGES (3) Survey of the significant features of existing programming languages with emphasis on understanding the concepts abstracted from those languages. The course covers: algorithmic languages such as ALGOL, problem oriented languages such as SNOBOL, theoretically interesting languages such as LISP, and general purpose languages such as FORTRAN and PL/1. Prerequisites: 23.235 and 23.212 or 23.337. (No credit toward a mathematics major.)
- 23.337 INTRODUCTION TO COMPUTER SCIENCE I (3) This course develops the background for further study in computer science by developing a better understanding of programming techniques and computer organization. Prerequisites: 23.235 and 50.273.
- 23.338 INTRODUCTION TO COMPUTER SCIENCE II (3) A continuation of 23.337. Prerequisites: 23.337 and 50.274.
- 23.339 PROGRAMMING SYSTEMS (3) This course introduces the student to basic computer organization, machine language programming and the use of assembly language programming. Emphasis will be on the overall structure of machines and programming systems. Prerequisite: 23.212 or 23.338. (No credit toward a mathematics major.)
- 23.411 SYSTEMS AND DESIGN (3) A course designed to guide the student through the stages of the evolution of data processing systems including analyses of present information flow, system specifications, equipment selection, and the implementation of the system to provide an understanding of the skill and knowledge needed for the effective use of data processing equipment in meeting information needs. Prerequisite: 23.339. (No credit toward a mathematics major.)
- 23.437 FILE AND DATA STRUCTURES (3) This is a study of the relations which hold among elements of data involved in problems, the structures of storage media and machines, the methods which are useful in representing structured data in storage, and the techniques of storing data; strings, arrays, linear and orthogonal lists. The representation of trees and graphs is covered. Storage systems and structures, symbol tables, searching techniques and sorting techniques are developed. Formal specification of data structures in programming languages and generalized data management systems are investigated. Prerequisite: 23.339. (No credit toward a mathematics major.)

Modern Languages

Professors: MAGILL (*Chairman*), VIDAL-LLECHA, SHEETS

Associate Professors: CACOSSA, GIRO, McDERMOTT, SABIN

Assistant Professors: EVANS, HAUPT, LEVNO, POIRIER, RIEDNER

Instructor: WEBER

Visiting Lecturer: VRIGNAUD, BARRESI

The purposes of the Modern Language Department are to offer language electives to all students of the college, to offer the requirements for the teaching of a modern foreign language, and to offer a major or minor in French, German, and Spanish to students interested in acquiring reading comprehension and ability to converse with intelligibility in one or more of these languages. Russian, Hebrew, Japanese, Kiswahili, and Italian courses are offered on the lower levels and will be expanded as required by interest.

Language Major

A major consists of a minimum of 30 credit hours beyond the intermediate level in the major language, as indicated in the outlines below; no more than half of the 30 credit hours may be transferred from other colleges; each major program includes at least 9 hours of literature courses at the 400 level. Any modification of this program, including adjustments for courses taken abroad, must be approved in writing by the department chairman. Teacher education candidates should note that the advanced grammar course is to be taken before they do their practice teaching. Students with home or family background in the language studied will have their programs, as described below, modified according to their proficiency in the language.

Major Program in French & German

composition & conversation	(6 hours)
survey of literature	(6 hours)
18 hours of electives from within the department's offerings in the target language, including 9 hours of literature courses at the 400 level	(18 hours)
	<hr/>
	30 hours

Major Program in Spanish

composition & conversation	(6 hours)
survey of literature	(6 hours)
culture & civilization	(6 hours)
12 hours of electives from within the department's offerings in the target language, including 9 hours of literature courses at the 400 level	(12 hours)
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	30 hours

Language Minor

The minor officially does not exist at Towson State College. The term "minor" refers to the Maryland State Department of Education teaching certificate requirement. These are either (a) 24 hours of college credit in the particular language, or (b) 18 hours if two or more years were absolved in a secondary school after the ninth grade. In addition, Education 26.397 is required of teacher candidates.

Policies Concerning Language

The second semester of an elementary language course must be completed successfully before credit is granted for the first semester's work.

The completion of the intermediate level, or its equivalent, is required of all candidates for the Bachelor of Arts degree. This requirement may be met by (a) completing two or more years of the language in high school plus the intermediate level course in college, (b) completing the elementary and inter-

mediate level courses in the language in college, (c) successfully completing an equivalence examination administered by the Department of Modern Languages at Towson State College or successfully completing one semester of any course beyond the intermediate level.

Students who present two or more years of a language from high school and wish to continue in that language are normally placed in the intermediate course in college, since the college elementary course would be a repetition of the work already taken in high school; these students may not receive college credit for the elementary course without permission from the department. Qualified students may enroll in the advanced courses (300 level) as a result of placement tests, administered by the Towson State College Department of Modern Languages, which should be taken prior to the student's first registration in the college.

FRENCH COURSES (FREN)

Lower Division — Undergraduate

32.101-102 FRENCH ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

32.201-202 FRENCH INTERMEDIATE I, II (4, 3) Review of grammar; conversation and prose composition; reading of texts of cultural value; outside readings. Prerequisite: 32.101-32.102 or equivalent. Conducted in French.

Upper Division — Undergraduate Only

32.301 FRENCH CONVERSATION (3) Intensive exercises in French conversation beyond the intermediate level. Prerequisite: 32.201-202 or equivalent. Conducted in French.

32.302 FRENCH COMPOSITION (3) Intensive exercises in French composition beyond the intermediate level. Prerequisite: 32.201-202 or equivalent. Conducted in French.

32.311 FRENCH CULTURE AND CIVILIZATION (3) A brief survey of the history, geography,

and institutions of France. Prerequisite: 32.201-32.202 or equivalent. Conducted in French.

32.321, 322 SURVEY OF FRENCH LITERATURE I, II (3, 3) French literature from Chanson de Roland to the present. Prerequisite: 32.201-202 or equivalent. Conducted in French.

32.391 ADVANCED FRENCH GRAMMAR (3) French syntax, idiomatic construction, word formation. Conversation and oral drill. Prerequisite: 32.301, 32.302. Conducted in French.

Upper Division — Undergraduate and Graduate

32.325 MASTERPIECES OF FRENCH LITERATURE IN TRANSLATION (3) An intensive study of English translations of a limited selection of works chosen from the acknowledged masterpieces of French literature, presented in chronological order (not open to French majors). Prerequisite: English 30.102.

32.401 FRENCH PHONETICS (3) The pronunciation of contemporary French; drill in pronunciation. Prerequisite: completion of intermediate French 32.201, 202.

32.402 FRENCH LINGUISTICS (3) The linguistic structure of the French language with an introduction to transformational grammar. Prerequisite: 32.301-302.

32.411 FRENCH LITERATURE OF THE MIDDLE AGES (3) Selections from the major works of the period from the 12th through the 15th centuries in Modern French Versions. Prerequisite: 32.321-322. Conducted in French.

32.415 FRENCH LITERATURE OF THE SIXTEENTH CENTURY (3) Principle works of the major writers of the sixteenth century

with special attention to Rabelais, the Pléiade, and Montaigne. Prerequisite: 32.321, 322 or equivalent. Conducted in French.

32.421 FRENCH LITERATURE OF THE SEVENTEENTH CENTURY I (3) Principal works of the major writers in poetry, drama, philosophy, criticism, and the novel, to about 1660. Prerequisite: 32.321, 322 or equivalent. Conducted in French.

32.422 FRENCH LITERATURE OF THE SEVENTEENTH CENTURY II (3) Continuation of French 32.421 from 1660 to 1700. Prerequisite: 32.321, 322 or equivalent. Conducted in French.

32.425 FRENCH LITERATURE OF THE EIGHTEENTH CENTURY (3) Principal works of the major writers with the concurrent literary and philosophical trends. Prerequisite: 32.321, 322 or equivalent. Conducted in French.

32.431 FRENCH LITERATURE OF THE NINETEENTH CENTURY I (3) The rise, flowering, and decline of Romanticism, with the contemporary writers outside the movement. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

- 32.432 FRENCH LITERATURE OF THE NINETEENTH CENTURY II (3) The major literary figures and doctrines of the latter half of the nineteenth century. Prerequisite: 32.321, 322 or equivalent. Conducted in French.
- 32.441 FRENCH LITERATURE OF THE TWENTIETH CENTURY I (3) From Gide, Proust, Valéry, Péguy, and Claudel to the Second World War. Prerequisite: 32.321, 322 or equivalent. Conducted in French.
- 32.442 FRENCH LITERATURE OF THE TWENTIETH CENTURY II (3) Sartre, Camus, Anouilh, and other present-day writers. Prerequisite: 32.321, 322 or equivalent. Conducted in French.
- 32.451-452 FRENCH POETRY I, II (3, 3) The development of French poetry from the Middle Ages to the present day. Conducted in French. Prerequisite: 32.321, 322.
- 32.461-462 FRENCH DRAMA I, II (3, 3) The development of French drama from the Middle Ages to the present day. Conducted in French. Prerequisite: 32.321, 322.
- 32.471 THE FRENCH NOVEL I (3) From the 17th century to Flaubert (theory of the novel as a genre, the novel from *Préciosité* to "La Princesse de Clèves" in the 17th century, the picaresque and philosophical novel in the 18th century, Balzac and Stendhal in the 19th century). Prerequisite: 32.321, 322 or equivalent. Conducted in French.
- 32.472 THE FRENCH NOVEL II (3) From Flaubert to the "Nouveau Roman" (evolution of the novel from Flaubert to Proust, Gide, Malraux, Giono and the theories of the "Nouveau Roman", Robbe-Grillet and Butor). Prerequisite: 32.321, 322 or equivalent. Conducted in French.
- 32.481 THE CONTE (3) Emphasis on the realists and some of the more recent authors. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.
- 32.487-488 TRAVEL AND STUDY ABROAD (4-19) Study in a French University. Students will live and take courses at the University of Clermont-Ferrand, France. Dates: Choice of October through June (2 semesters) or February through June (1 semester). Prerequisite: Three years of college French or equivalent.
- 32.491 DIRECTED READING IN FRENCH LITERATURE (3) Reserved for superior students under the guidance of a department advisor. Prerequisite: at least three hours of literature study at the 400 level. Conducted in French.
- 32.492 DIRECTED READING IN FRENCH (3) Similar to 32.491 with concentration on a different subject matter. Prerequisite: at least three hours of literature study at the 400 level. Conducted in French.
- 32.495-496 HONORS SEMINAR (3, 3) Discussion of a central topic to be determined by the department, with independent work by the students. Required of all students in the Honors Program. Prerequisite: 32.491, 32.492. Conducted in French.
- 32.498-499 SENIOR THESIS IN FRENCH (2, 2) Research and writing of a Thesis, to be directed by a departmental advisor. Oral defense of the Thesis before a committee of members of the department and at least one outside examiner. Credit for 32.498 not awarded until 32.499 is successfully completed. Prerequisite: 32.495, 32.496.

Graduate Division

- 32.503 HISTORY OF THE FRENCH LANGUAGE (3) A rapid survey of the major phenomena of French linguistic history. Some knowledge of Latin desirable. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.505 FRENCH STYLISTICS (3) Practice in writing and comparison of style of various writers. Intensive and detailed *explications de texte*. Discussion, oral and written reports. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.533-534 SEMINAR ON FRENCH CLASSICISM I, II (3, 3) The origins and underlying ideas of classicism. Study of main classic writers, with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.535 HISTORY OF OLD FRENCH LITERATURE (3) The history of French Literature from the eleventh to the fifteenth centuries, with illustrative readings. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.536 FRENCH LITERATURE OF THE RENAISSANCE (3) Seminar on French Literature of the Sixteenth Century, concentrating on one or two major writers, with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.538 SEMINAR IN 18TH CENTURY FRENCH LITERATURE (3) The literature of the French Enlightenment, concentrating on one or two major authors, with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.539 THE ROMANTIC ERA IN FRANCE (3) Sources and theories of French Romanticism. Works of major French romantic writers, with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French. Conducted in French.
- 32.540 THE LATE 19TH CENTURY IN FRANCE (3) A study of the main writers of the later Nineteenth Century, with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French. Conducted in French.

*32.541 PERSPECTIVES OF 20TH CENTURY LITERATURE I (3) Critical study of a major Twentieth Century writer (1st semester—1880-1930) with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French or permission of instructor.

*32.542 PERSPECTIVES OF 20TH CENTURY LITERATURE II (3) Critical study of a major Twentieth Century writer (2nd semester—contemporary) with shifting emphasis from year to year. Prerequisite: Undergraduate degree in French or permission of instructor.

32.543-544 CRITICAL APPROACHES TO FRENCH LITERATURE (3, 3) A history of French literary criticism leading to the study of the

various techniques and objectives of all literary criticism and analysis, eventuating in the application of these techniques by the student himself to selected works of French Literature. Prerequisite: Undergraduate degree in French. Conducted in French.

32.555-556 FRENCH REALISM AND NATURALISM (3, 3) The main works of Balzac, Stendhal, Flaubert, Les Goncourt, Zola, Maupassant and Daudet with shifting emphasis from year to year. Prerequisite: Permission of instructor. Conducted in French.

32.699 THESIS (6) Optional for students in the French Master of Arts program. Prerequisite: Undergraduate degree in French. Conducted in French.

GERMAN COURSES (GERM)

Lower Division — Undergraduate

36.101-102 GERMAN ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

36.201-201 GERMAN INTERMEDIATE I, II (4, 3) Review of grammar; conversation and prose composition; reading of texts of cultural value. Prerequisite: 36.101-102 or equivalent. Conducted in German.

Upper Division — Undergraduate Only

36.301-302 COMPOSITION AND CONVERSATION I, II (3, 3) Composition and conversation beyond intermediate level. Prerequisite: 36.201-202 or equivalent. Conducted in German.

institutions of Germany. Prerequisite: 36.201-202 or equivalent. Conducted in German.

36.303 GERMAN STYLISTICS (3) Development of writing skills with stress on language structure and important aspects of style. Prerequisite: 36.301-302 or the equivalent.

36.321-322 SURVEY OF GERMAN LITERATURE I, II (3, 3) German literature from the Hildebrandslied to the present. Prerequisite: 36.201-202 or equivalent. Conducted in German.

36.311 CULTURE AND CIVILIZATION (3) A brief survey of the history, geography, and

36.391 ADVANCED GERMAN GRAMMAR (3) German syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Prerequisite: 36.301-302. Conducted in German.

Upper Division — Undergraduate and Graduate

36.325 MASTERPIECES OF GERMAN LITERATURE IN TRANSLATION (3) An intensive study of English translations of a number of acknowledged masterpieces of German literature. Not open to German majors. Prerequisite: English 30.102.

and Strum und Drang. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.401 GERMAN PHONETICS (3) The pronunciation of contemporary German, drill in pronunciation. Prerequisite: Completion of intermediate German 36.201-202.

36.427-428 CLASSICISM I, II (3, 3) First semester: the beginnings of German classicism: Goethe, Schiller, Lessing; second semester: the later works of Goethe and Schiller. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.411 MEDIEVAL GERMAN LITERATURE (3) Special emphasis on the flowering period of epic and lyric poetry. Readings are in New High German translation. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.431 ROMANTICISM (3) German literature during the Romantic era (1790-1830). Hölderlin, Novalis, Tieck, Brentano, Grillparzer. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.421 HUMANISM, REFORMATION AND THE BAROQUE (3) A survey of the philosophy and literature from the end of the Middle Ages to 1750. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.432 REALISM (3) A study of German literary realism from the Vormärz through Poetic Realism. Heine, Büchner, Hebbel, Wagner, Keller, Fontane. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.425 PRE-CLASSICISM (3) German literature from the end of the Baroque to the beginnings of Classicism. Focus on the Aufklärung

36.441 MODERN GERMAN LITERATURE (3) The modern masters: Kafka, Mann, Hesse, Rilke, Brecht. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.442 GERMAN LITERATURE SINCE 1945 (3)
Themes and movements since World War II. Poetry: Eich, Enzensberger, Celan, Bachmann; prose fiction: Böll, Grass; drama: Borchert, Dürrenmatt, Frisch. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.451 STUDIES IN THE GERMAN LYRIC (3)
Focus on a particular period, movement or author, to be determined after consultation with majors. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.461 GERMAN DRAMA OF THE 19TH AND 20TH CENTURIES (3) The development of modern German drama in the successive literary movements, beginning with Kleist. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.465 GOETHE'S FAUST (3) A study of the background, themes and structures of this masterpiece. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.471 THE GERMAN NOVEL (3) A study of the origins and development of the genre in German literature. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.481 THE GERMAN NOVELLE (3) The theory and development of the Novelle in German literature from Goethe to the present. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.491-492 DIRECTED READINGS IN GERMAN (3, 3) Reserved for superior students under the guidance of a departmental advisor. Content related to student's previous program. Prerequisite: at least three hours of study at the 400 level.

36.495-496 HONORS SEMINAR (3, 3) Discussion of a central topic to be determined by the department, with independent work by the students. Required of all students in the Honors Program. Conducted in German. Prerequisite: 36.491 or 36.492.

36.498-499 SENIOR THESIS IN GERMAN (2, 2) Research and writing of a Thesis, to be directed by a departmental advisor. Oral defense of the Thesis before a committee of members of the department and at least one outside examiner. Credit for 36.498 not awarded until 36.499 is successfully completed. Prerequisite: 36.495, 36.496.

HEBREW COURSES (HEBR)

Lower Division — Undergraduate

39.101-102 ELEMENTS OF HEBREW I, II (3, 3)
An introduction to Hebrew. Speaking, reading, and writing, the development of conversational ability, free composition, and translation from English into Hebrew. Credit given on completion of both semesters.

ITALIAN COURSES (ITAL)

Lower Division — Undergraduate

46.101-102 ITALIAN ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation

46.201-202 ITALIAN INTERMEDIATE I, II (4, 3)
Review of grammar, conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: 46.101-102 or equivalent.

Upper Division — Undergraduate Only

46.301-302 ITALIAN COMPOSITION AND CONVERSATION I, II (3, 3) Composition and conversation beyond the Intermediate level. Prerequisite: 46.201-202. Conducted in Italian.

46.321-322 SURVEY OF ITALIAN LITERATURE I, II (3, 3) A thorough examination of Italian literature from the thirteenth century to the present. Prerequisite: 46.201-202. Conducted in Italian.

JAPANESE COURSES (GEST)

Lower Division — Undergraduate

33.105-106 JAPANESE ELEMENTS I, II (3, 3)
Development of elementary vocabulary and sentences, forms of written language, conversation, composition and translation. This course will be given using the techniques of programmed instruction.

33.205-206 JAPANESE INTERMEDIATE III, IV (3, 3) Review of elementary Japanese; intermediate Kanji; conversation and prose composition; translations; outside readings commensurate with the ability of individual student. This course will be given using the techniques of programmed instruction. Prerequisite: Completion of 33.105-106.

KISWAHILI COURSES (BLST)

Lower Division — Undergraduate

- 15.001 KISWAHILI (EXPERIMENTAL) (3) An introductory course in the Kiswahili language. Emphasis will be placed on the grammatical structure of the language and elementary conversation. The course may also serve as a preparation for those who want to understand the culture of the Kiswahili speaking people.

RUSSIAN COURSES (RUSS)

Lower Division — Undergraduate

- 74.101-102 RUSSIAN ELEMENTS I, II (3, 3) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

- 74.201-202 RUSSIAN INTERMEDIATE I, II (3, 3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: 74.101-102 or equivalent.

SPANISH COURSES (SPAN)

Lower Division — Undergraduate

- 82.101-102 SPANISH ELEMENTS I, II (4, 4) Thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

- 82.201-202 SPANISH INTERMEDIATE I, II (4, 3) Review of grammar; conversation and prose

composition; reading of texts of cultural value; outside readings commensurate with the ability of the individual student. Prerequisite: 82.101-102 or equivalent. Conducted in Spanish.

Upper Division — Undergraduate Only

- 82.301-302 COMPOSITION AND CONVERSATION I, II (3, 3) Composition and conversation beyond intermediate level. Prerequisite: 82.201-202 or equivalent. Conducted in Spanish.

- 82.311 CULTURE AND CIVILIZATION OF THE SPANISH-SPEAKING PEOPLES I (3) Value-system and way of life as embedded in the language, history, arts and customs of Spain. Prerequisite: 82.301-302 or equivalent. Conducted in Spanish.

- 82.312 CULTURE AND CIVILIZATION OF THE SPANISH-SPEAKING PEOPLES II (3) Value-

system and way of life as embedded in the language, history, arts and customs of Ibero-America. Prerequisite: 82.301-302 or equivalent.

- 82.321-322 SURVEY OF SPANISH LITERATURE I, II (3, 3) Spanish and Spanish-American literature, with collateral readings. Prerequisite: 82.201-82.202 or equivalent. Conducted in Spanish.

- 82.391 ADVANCED SPANISH GRAMMAR (3) Spanish syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Prerequisite: 82.301, 82.302. Conducted in Spanish.

Upper Division — Undergraduate and Graduate

- 82.325 MASTERPIECES OF SPANISH LITERATURE IN TRANSLATION (3) An intensive study of English translations of a limited selection of works chosen from the acknowledged masterpieces of Spanish literature, presented in chronological order (not open to Spanish majors). Prerequisite: 30.102.

- 82.401 SPANISH PHONETICS (3) The pronunciation of contemporary Spanish, drill in pronunciation. Prerequisite: Completion of intermediate Spanish 82.201-202.

- 82.417-418 THE GOLDEN AGE IN SPANISH LITERATURE I, II (3, 3) Principal attention to Cervantes, Tirso de Molina, Lope de Vega, and Ruiz de Alarcón; Góngora and his role. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.

- 82.431 NINETEENTH CENTURY SPANISH LITERATURE (3) The main literary movements of the century: neo-classicism, romanticism, realism, naturalism, and special emphasis on "costumbrismo." Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.

- 82.435 NINETEENTH CENTURY SPANISH-AMERICAN LITERATURE I (3) Principal works of the major writers to about 1860. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.

- 82.436 NINETEENTH CENTURY SPANISH-AMERICAN LITERATURE II (3) Principal works of the major writers from 1860-1900. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.

- 82.441 TWENTIETH CENTURY SPANISH LITERATURE I (3) Special attention to the literary movement called "The Generation of '98." Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.442 TWENTIETH CENTURY SPANISH LITERATURE II (3) The writers of the last thirty years. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.443 TWENTIETH CENTURY SPANISH-AMERICAN LITERATURE I (3) Modernism to the Contemporary Period. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.444 TWENTIETH CENTURY SPANISH-AMERICAN LITERATURE II (3) The Contemporary Period. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.451 SPANISH POETRY I (3) Special emphasis on Gustavo Adolfo Bécquer, Rubén Darío, Antonio Machado. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.452 SPANISH POETRY II (3) Emphasis on the poets of the generation of 1927, Pablo Neruda, and Vicente Aleixandre. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.461 SPANISH DRAMA I (3) Nineteenth and early twentieth century. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.462 SPANISH DRAMA II (3) Contemporary playwrights such as Casona, Usigli, and Vallejo. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.471 SPANISH NOVEL I (3) Emphasis will be given to Benito Pérez Galdós and Pío Baroja. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.472 SPANISH NOVEL II (3) Emphasis on contemporary writers including: Camilo José Cela, Miguel Angel Asturias, Ramón Sender, Juan Goytisolo. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.481 SPANISH SHORT STORY (3) The short story in Spain and Spanish America with emphasis on twentieth century authors. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.
- 82.491 DIRECTED READING IN SPANISH LITERATURE (3) Reserved for superior students under the guidance of a departmental advisor. Prerequisite: At least three hours of literature study at the 400 level. Conducted in Spanish.
- 82.492 DIRECTED READING IN SPANISH (3) Similar to Span 491 with concentration on a different subject matter. Prerequisite: At least three hours of literature study at the 400 level. Conducted in Spanish.
- 82.495-496 HONORS SEMINAR (3,3) Discussion of a central topic to be determined by the department, with independent work by the students. Required of all students in the Honors Program. Conducted in Spanish. Prerequisite: 82.491 or 82.492.
- 82.498-499 SENIOR THESIS IN SPANISH (2,2) Research and writing of a Thesis, to be directed by a departmental advisor. Oral defense of the Thesis before a committee of members of the department and at least one outside examiner. Credit for 82.498 not awarded until 82.499 is successfully completed. Prerequisite: 82.495, 82.496.

Graduate Division

- 82.503 HISTORY OF THE SPANISH LANGUAGE (3) Survey of the development of the Spanish language from its origins to present day in Spain and in Spanish-America. Prerequisite: Undergraduate degree in Spanish.
- 82.505 SPANISH STYLISTICS (3) Intensive and detailed analysis of selected texts. Discussion and oral reports. Required weekly compositions. Prerequisite: Undergraduate degree in Spanish.
- 82.521 SEMINAR IN UNAMUNO (3) Life's tragedy: conflict between reason and faith as shown in his novels, theatre, essays, and poetry. Prerequisite: B.A. or 18 hours credit of Spanish beyond Intermediate or permission of the instructor. Conducted in Spanish.
- 82.531 SEMINAR ON BENITO PEREZ GALDOS (3) His vision of the condition of man in XIXth-Century Spain and his effort to improve society by changing individual behavior. Prerequisite: B.A. degree in Spanish. Conducted in Spanish.
- 82.535 SPANISH LITERATURE OF THE MIDDLE AGES (3) Reading, discussion and analysis of early Spanish literature. Prerequisite: Undergraduate degree in Spanish.
- 82.536 POETRY & DRAMA OF THE SPANISH GOLDEN AGE (3) Study of major writers of the Siglo de Oro, with shifting emphasis from year to year. Prerequisite: B.A. degree in Spanish. Conducted in Spanish.
- 82.539 CRITICAL APPROACHES TO SPANISH LITERATURE (3) Study and analysis of the formal aspects of selected Spanish literary texts. Prerequisite: Undergraduate degree in Spanish.
- 82.541 SEMINAR IN RAMON DEL VALLE-INCLAN (3) Analysis and discussion of the works of Ramón del Valle-Inclán. Prerequisite: Undergraduate degree in Spanish.
- 82.551 SEMINAR IN PIO BAROJA (3) Analysis and discussion of the works of Pío Baroja. Prerequisite: Undergraduate degree in Spanish.
- 82.553 MIGUEL DE CERVANTES (3) *Don Quijote de la Mancha* and the *Novelas Ejemplares*, reading and detailed analysis. Prerequisite: Undergraduate degree in Spanish.

Music

Professors: ALPER, ARRINGTON (*Chairman*)

Associate Professors: COULANGE, DRUCKER, DURO, MARCHAND, MYERS, REYES

Assistant Professors: BUSEN, CRAWFORD, CYR, GRISWOLD, MELICK, MOORE,
OLSON, RAUSCHENBERG, RICHARDSON, TAN, TERWILLIGER

Instructors: ANTHONY, BLAKE, HOFFMAN, LEVY, MINGER, PALANKER, PHILLIPS,
FINKELSTEIN, CHESTER, SMITH, KELLY, BARNES

The Music Department serves both music majors and general students.

For the non-major, or general student, the purposes are to give opportunities for enrichment of cultural background and creative expression; for the music major, the purposes are to give professional training so that he will attain a high standard of artistic performance, be prepared to teach, and be qualified in his chosen field. Ample opportunity is given for student participation in musical organizations and ensembles which provides both valuable experience, and contributes to the cultural life of the College and the Community.

Non-Majors may elect any music course for which they have the prerequisites. Participation in musical organizations is open to all interested students. There is an additional fee for private lessons and registration for same must be made with the consent of the Music Department Chairman.

Music Major

Students wishing to major in music or music education should write to the Chairman of the Music Department at the time they make application to Towson State College through the Director of Admissions.

A placement examination in performance and music theory will be given prospective applicants on the third Saturday in May preceding their college admission. The purpose of this examination is to aid the Music Department in determining the most satisfactory curriculum pattern for the individual student.

Each music major is required to choose a primary instrument or voice, and study with teachers provided by Towson State College. Every music major will perform on his primary instrument before a faculty jury at the end of each semester of private study.

Every Music Major will perform a senior recital on his primary performing medium as a requirement for graduation. Every music major will take a piano proficiency examination at the end of the sophomore year. Student may repeat examination until satisfactory completion which must be done before student teaching and/or graduation. Requirements may be procured in the Music Department office.

Each music major is required to participate in 6 semesters of major ensemble.

The following number of music credits are required for graduation in the various music degree programs: BS (Music Education), instrumental major, 67 credits plus an additional 12 credits in Student Teaching; BS (Music Education), vocal major, 64 credits plus an additional 12 credits in Student Teaching; BA (Performance, Music Literature, and Music Theory) requires 73 credits.

The academic program in music will be determined on an individual basis for each transfer student based upon transcript evaluation, placement examination, and audition by the Music Department.

The Department of Music offers the following two courses of study:

1. A course of study preparing students to teach music as specialists, leading to a Bachelor of Science Degree in Music Education.

Requirements: (a) General Education Requirements for all students; (b) Music Theory 16 credits; Private Lessons 7 credits minimum, more credits required if not adequately prepared for senior recital; Voice Class (Instru-

mental Majors) 1 credit, (Piano, Guitar Majors) 2 credits; Music Organizations (Choirs, Bands, Orchestra, etc.) 6 semesters; Introduction to Music Literature (for Majors) 3 credits; Music History 6 credits; Class Instrument Lessons, String, Brass, Percussion, Woodwind, (Instrumental Majors) 2 credits of each, (EXCEPTION: Brass Majors take only second semester of Brass Class, Percussion Majors take only first semester of Percussion Class), (Vocal Majors) 1 credit; conducting 3 credits; Music in the Elementary Schools 3 credits (Music Majors section); Music in Secondary Schools 3 credits; Organization and Administration of Music Education 3 credits; Choral and Instrumental Arranging 3 credits; Form and Analysis 3 credits; General Psychology 3 credits; Educational Psychology 3 credits; Foundations of Education 3 credits; Survey of Education 3 credits; Student Teaching (both elementary and secondary) 12 credits.

2. A course of study in the field of arts and sciences leading to a Bachelor of Arts degree with emphasis in performance, music theory, or music literature. The Bachelor of Arts degree in music is a program designed for the study of music within a liberal arts curriculum with a broad coverage of the field. The burden of study should be upon the literature of music designed to develop basic musicianship, the ability to perform the literature well, and provide a set of principles and terms that lead to a fuller intellectual grasp of the art. It means to give an appropriate background for prospective candidates for advanced degrees who are preparing for such careers as musicology, composing, and performance.

Requirements: (a) General Education Requirements. (b) Foreign language requirement, 12 credits. (c) Music Course Requirements:

BA in PERFORMANCE: Music Theory 16 credits; Private Lessons 16 credits; Introduction to Music Literature 3 credits; Music History 6 credits; Music Organization 8 semesters; Form and Analysis 3 credits; Conducting 3 credits; Pedagogy and Practice 3 credits; Literature Survey in Major 3 credits; Electives (liberal arts) 3 credits, (Music) 9 credits; Recital.

BA in MUSIC LITERATURE: Music Theory 16 credits; Private Lessons 8 credits; Music Organization 8 semesters; Introduction to Music Literature 3 credits; Music History 6 credits; Counterpoint 3 credits; Form and Analysis 3 credits; Choral and Instrumental Arranging 3 credits; Advanced Music History 15 credits; Elective 9 credits; Research in Music 3 credits.

BA in MUSIC THEORY: Music Theory 16 credits; Private Piano (and Class Piano) 8 credits (Private Lessons in sophomore, junior, and senior year may be in area other than piano with approval of theory advisor); Voice Class 1 credit; Music Organization 8 semesters; Introduction to Music Literature 3 credits; Music History 6 credits; Counterpoint 6 credits; Choral and Instrumental Arranging 6 credits; Composition 6 credits; Form and Analysis 3 credits; Conducting 3 credits; Advanced Music History 3 credits; Electives 10 credits.

MUSIC COURSES (MUSC)

Lower Division — Undergraduate

54.101 (103) INTRODUCTION TO MUSIC LITERATURE (3) Music literature to acquaint the student with music through class discussions and listening. Suggested course for the General Education requirement.

54.131-132 MUSIC THEORY I AND II (4, 4) The study and practice of sight singing, ear training and harmony in integrated course. Prerequisite for Theory I: Ability to read treble and bass clefs and knowledge of

major and minor scales. Prerequisite for Theory II: Theory I.

54.141-142 BRASS ENSEMBLE (1, 1) Study and performance of advanced brass literature, required of all students majoring in brass instruments. Admission by permission of the director.

54.145-146 PERCUSSION ENSEMBLE (1, 1) Study and performance of advanced percussion literature; supplement and improve the

percussion student's musical training by acquainting the student with the various techniques involved in performing on the numerous percussion instruments. Required of all percussion majors.

- 54.149-150 **STRING ENSEMBLE (1, 1)** Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of the director.
- 54.151-152 **VOICE ENSEMBLE (1, 1)** Small group study and performance of advanced choral literature. Admission by permission of director.
- 54.153-154 **WOODWIND ENSEMBLE (1, 1)** Study and performance of advanced woodwind literature required of all students majoring in woodwind instruments. By permission of the director.
- 54.155-156 **CLARINET CHOIR (1, 1)** Study and performance of clarinet choir literature. Open to all students by audition.
- 54.157-158 **JAZZ ENSEMBLE (1, 1)** Study and performance of music of the jazz idiom. Open to all students by audition.
- 54.171-172 (150) **BRASS PRIVATE LESSONS (1-3)** Private lessons in brass. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.173-174 (150) **ORGAN PRIVATE LESSONS (1-3)** Private lessons in organ. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.175-176 (150) **PERCUSSION PRIVATE LESSONS (1-3)** Private lessons in percussion. Fee of \$50.00 per semester. One half-hour lesson per week.
- 54.177-178 (150) **PIANO PRIVATE LESSONS (1-3)** Private lessons in piano. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.179-180 (150) **STRING PRIVATE LESSONS (1-3)** Private lessons in strings. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.181-182 (150) **VOICE PRIVATE LESSONS (1-3)** Private lessons in voice. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.183-184 (150) **WOODWIND PRIVATE LESSONS (1-3)** Private lessons in woodwinds. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.185-186 (150) **GUITAR PRIVATE LESSONS (1-3)** Private lessons in guitar. Fee of \$50.00 per semester per credit. One half-hour lesson per week.
- 54.187-188 **COMPOSITION PRIVATE LESSONS (1-3)** Private lessons in composition. Fee of \$50.00 per semester. One half-hour lesson per week.
- 54.211-212 **BRASS CLASS (1, 1)** Class instruction in brass instruments.
- 54.215-216 **PERCUSSION CLASS (1, 1)** Class instruction in percussion instruments.
- 54.217-218 (242, 243) **PIANO CLASS (1, 1)** Class instruction in piano playing, with one hour daily practice in preparation required. Open to beginning students and students with a minimum of piano work, by permission of the department chairman.
- 54.219-220 (220, 221) **STRING CLASS (1, 1)** Class instruction in string instruments.
- 54.221-222 (205, 206) **VOICE CLASS (1, 1)** Class instruction in singing, with emphasis upon basic singing techniques and voice production through the use of song material.
- 54.223-224 **WOODWIND CLASS (1, 1)** Class instruction in woodwind instruments.
- 54.225-226 **GUITAR CLASS (1,1)** Class instruction in guitar.
- 54.231-232 **THEORY III AND IV (4, 4)** The study and practice of sight singing, ear training, and harmony in an integrated course. Prerequisite for Theory III: Theory II. Prerequisite for Theory IV: Theory III.
- 54.233 (203) **MUSIC FUNDAMENTALS (2)** Basic music skills and experience in the use of music instruments for prospective kindergarten and elementary teachers.
- 54.243 **RECORDER CLASS (1)** Studying and performing works written particularly for the recorder. This course cannot be used towards fulfillment of the College's General Education Requirements. Prerequisites: Ability to read music.
- 54.257-258 **PEP BAND (1, 1)** Wind ensemble which performs at various college functions such as athletic events, assemblies, etc. Prerequisite: Consent of instructor.
- 54.259-260 **COMMUNITY CHORUS (1,1)** Study and performance of advanced choral literature. Admission by permission of the director.
- 54.261-262 (211, 212) **CONCERT CHOIR (1, 1)** Study and performance of advanced choral literature. Open to all students with audition.
- 54.263-264 (217-218) **MEN'S GLEE CLUB (1, 1)** Study and performance of choral literature written and arranged for male voices. Open to all male students by permission of director.
- 54.265-266 (209, 210) **WOMEN'S CHORUS (1, 1)** Study and performance of choral literature for female voices. Open to all female students by permission of director.
- 54.267-268 (215, 216) **ORCHESTRA (1, 1)** Study of orchestral literature. Open to all students by audition.
- 54.269-270 (240, 241) **CONCERT BAND (1, 1)** Study and performance of band literature. Open to all students by audition.
- 54.271-286 (250) **PRIVATE LESSONS (1-3)** Refer to 171-186 for course description, fee and time.

Upper Division — Undergraduate

- 54.301-302 (228, 229) **HISTORY OF MUSIC (3, 3)** Study of development of music in the western world through discussion, performance and recording. First semester includes music from the Greeks to the end of the Baroque period. Second semester traces the development of music from the Classic period to the present.
- 54.307 (372) **TEACHING MUSIC IN THE ELEMENTARY SCHOOLS (2, 3)** Acquaints students with music programs in the elementary school through lecture, class discussion, and practice with children. Prerequisite: 54.233.
- 54.308 **METHODS OF TEACHING INSTRUMENTAL MUSIC (3)** Methods and materials in the instruction of instrumental music, elementary through secondary. Prerequisite: To be taken with student teaching.
- 54.309 **METHODS OF TEACHING CHORAL AND GENERAL MUSIC IN THE SECONDARY SCHOOL (3)** Methods and materials in the instruction of a general music program for the non-performing student, and a choral program for the performing student. Prerequisite: Taken with student teaching.
- 54.311-312 **ACCOMPANYING (3,3)** Study of vocal and instrumental accompanying with emphasis upon sight reading, transposition, and acquaintance with vocal and instrumental literature. Permission of instructor.
- 54.327 (316) **CHORAL CONDUCTING (3)** Group instruction in basic conducting techniques and interpretation with relation to choral organizations. Prerequisite: 54.132 or permission of instructor.
- 54.329 (317) **INSTRUMENTAL CONDUCTING (3)** Group instruction in basic conducting techniques and interpretation with relation to instrumental organizations. Prerequisite: 54.132 or permission of instructor.
- 54.335 (324) **CHORAL AND INSTRUMENTAL ARRANGING (3)** Composition and arranging techniques for voices and/or instruments. Prerequisite: 54.231-54.232, equivalent, or permission of instructor.
- 54.371-386 (350) **PRIVATE LESSONS (1-3)** Refer to MUSIC 171-186 for course description, fee and time.

Upper Division — Undergraduate and Graduate

- 54.401 (403) **MUSIC PRIOR TO 1600 (3)** The art of music in the West from its tentative beginnings in Greek and Hebrew music to the year 1600 A.D. Prerequisite: Consent of Department Chairman.
- 54.402 (404) **MUSIC OF THE BAROQUE PERIOD (3)** Style, forms and musical techniques from 1600 to 1750. Prerequisite: Consent of Department Chairman.
- 54.403 (405) **MUSIC OF THE CLASSICAL PERIOD (3)** Styles, forms and techniques of the period from 1750-1820. Particular emphasis is placed on instrumental categories of the string quartet, sonata, symphony and concerto as illustrated in the works of Haydn, Mozart and Beethoven. Attention is given to operatic and sacred compositions of the same masters. Prerequisite: Consent of Department Chairman.
- 54.404 (406) **MUSIC OF THE ROMANTIC PERIOD (3)** Musical styles, forms and techniques in the 19th century with special attention to the intellectual foundations of the Romantic movement. Prerequisite: Consent of Department Chairman.
- 54.405 (407) **CONTEMPORARY MUSIC (3)** Styles, forms and musical techniques since 1900. Prerequisite: Consent of Department Chairman.
- 54.408 (400) **ORGANIZATION AND ADMINISTRATION OF MUSIC EDUCATION (3)** Seminar discussion of the problems of organization and administration of music education. Prerequisite: Music Student Teaching, and/or consent of the instructor.
- 54.411 (412) **SURVEY OF OPERA (3)** Study of opera literature of various periods and styles. Consent of Department Chairman.
- 54.413 (245) **SYMPHONIC LITERATURE (3)** Orchestral music from the baroque to the present. The concerto, symphony, overture and other orchestral forms are examined. Prerequisite: Consent of Department Chairman.
- 54.421 (413) **AMERICAN MUSIC (3)** American music from the Colonial Period to the present. Prerequisite: Consent of Department Chairman.
- 54.423 (414) **HISTORY OF JAZZ (3)** Development of jazz and its peripheral effects upon music.
- 54.424 **ADVANCED WOODWINDS (Double Reeds) (3)** Study of advanced techniques on bassoon and oboe. Special emphasis given to reed-making and instrument repair. Prerequisites: 54.223, or consent of instructor.
- 54.425 (424) **ADVANCED PERCUSSION (3)** Study of advanced performance techniques on all percussion instruments. Prerequisite: Music 54.215, or consent of instructor.
- 54.427-428 **JAZZ ARRANGING (3, 3)** Study and practice of arranging of standard material for Jazz Ensembles. Prerequisite: 54.232 or consent of instructor.
- 54.429-430 **JAZZ IMPROVISATION (3, 3)** Study and practice of improvising in various jazz styles. Prerequisite: 54.231-232 or consent of instructor.

- 54.433 (423) ADVANCED THEORY (3) Continued development of skills in more advanced melodic, harmonic and rhythmic aspects of music through hearing, playing and writing. Prerequisite: 54.232.
- 54.435 (425) FORM AND ANALYSIS (3) Analysis of vocal and instrumental literature. Prerequisites: 54.231-54.232.
- 54.449-450 STRING ENSEMBLE (1, 1) Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of director.
- 54.459-460 COMMUNITY CHORUS (1, 1) Study and performance of advanced choral literature. Admission by permission of the director.
- 54.467-468 ORCHESTRA (1, 1) Study of orchestral literature. Open to all students by audition.
- 54.469-470 CONCERT BAND (1, 1) Study and performance of band literature. Open to all students by audition.
- 54.471-486 (450) PRIVATE LESSONS (1-3) Refer to MUSIC 171-186 for course description, fee and time.
- 54.493 INDEPENDENT RESEARCH IN MUSIC LITERATURE (3) Supervised research and musicological investigation of a selected topic culminating in a written senior thesis. May be repeated with credit. Prerequisite: 54.301, 54.302, and six hours of Advanced Music Hist. courses.
- 54.499 SENIOR RECITAL (1) Recital performance for graduation requirement. Prerequisites: Minimum of 6 credits of Private Lessons and approval of Department Chairman. Undergraduate credit only.

Graduate Division

- 54.501 CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION (3) A survey of current philosophies and objectives of music in the schools, and the scope and sequence of the music curricula, vocal and instrumental, on the elementary and secondary levels. Prerequisite: Admission to Graduate Program.
- 54.515 THE CONCERTO (3) A survey of the concerto form from its inception to the present. Analysis of stylistic, formal, and compositional aspects will be included. Prerequisite: Admission to Graduate standing with Music Major, or Consent of Department Chairman.
- 54.535 (524) ADVANCED CHORAL AND INSTRUMENTAL ARRANGING (3) Advanced arranging techniques including the scoring of original and other works for various combinations of instruments and/or voices. Prerequisite: 54.335, or equivalent, or consent of instructor.
- 54.539 MUSIC COMPOSITION (3) Analysis and discussion of works of major composers. Writing of original compositions in vocal and instrumental idioms. Prerequisites: 54.232, 54.335, 54.435.
- 54.561 SEMINAR IN INSTRUMENTAL MUSIC (3) Comparative analysis of current methods and materials used in schools and colleges. Instrumental conducting and repertoire. Construction of acoustical properties and basic techniques of instruments. Problems of ensemble and balance. Intonation, precision and interpretation are studied. Materials and music literature for bands, orchestras and small ensembles are evaluated. Prerequisite: Admission to the Graduate Program.
- 54.562 SEMINAR IN CHORAL (VOCAL) MUSIC (3) Comparative analysis of current methods and materials used in schools and colleges. Choral conducting and repertoire. Style, interpretation, tone quality, diction, rehearsal and conducting techniques are analyzed. Prerequisite: Admission to the Graduate Program.
- 54.571-586 (550) PRIVATE LESSONS (1-3) Refer to MUSIC 171-186 for course description, fee and time.
- 54.595 (550) RESEARCH METHODS IN MUSIC AND MUSIC EDUCATION (3) The application of methods of research to problems in the field of music and music education, the preparation of bibliographies and specialized techniques for the location, collection and treatment of data. The written exposition of research projects in the area of the student's major interest. Prerequisite: Admission to the Graduate Program.
- 54.699 THESIS (3)

Nursing

Associate Professor: SCHWALM (*Chairman*)

Assistant Professors: BURCH, COX, DAVIES, HUGHES, KEENEN, WIKOFF

History

In response to community needs for professional nurses in health care delivery, the Board of Trustees granted approval for the initiation of a baccalaureate program in professional nursing leading to the Bachelor of Science Degree. Development of the curriculum in the Nursing major was begun in September 1970 with the acceptance of the first group of students in February 1972. The curriculum is designed to meet the changing conceptual role of nursing—

THAT of using a unique core of knowledge and skills in assisting individuals and groups in varied environmental settings to promote, maintain and/or restore a balanced level of well being;

THAT of preparing committed citizens who value thought as well as earthly things.

Therefore, courses in the nursing major are designed around the episodic-distributive nursing care concept.*

Objectives

In the broad spectrum of contemporary health settings, the graduate from the Nursing major at Towson State College

...accepts self and others as persons of inherent worth and dynamic potential;

...is committed to the total well-being of man and society;

...assesses the essential economic, psychosocial and medical factors that contribute to the well-being of individuals and groups of all ages;

...uses critical thought and sensitivity in assessing health needs and in planning, providing and evaluating distributive and episodic nursing care;

...shows skill in organizing nursing functions and establishing priorities in the delivery of health care;

...gives competent, professional nursing care based on a broad foundational knowledge of the biological, physical and social sciences;

...communicates effectively and is sensitive to individual and group dynamics;

...teaches individuals and groups health maintenance through an interdisciplinary team endeavor and/or independently;

...participates reciprocally in the efforts of the allied professions in the delivery of distributive and episodic health services to the community;

...performs nursing within ethical and legal boundaries of the profession;

...functions as a participant in and consumer of research in nursing and allied disciplines;

...supports the concept of improved nursing practice through on-going systematic study;

...accepts the opportunities for informed membership in professional organizations or activities concerned with the well-being of man and society;

...is self directed in assessing and attaining personal and professional goals;

...possesses the academic foundations for graduate education in professional nursing.

Attainment of these objectives is accomplished through course study in the liberal arts, the sciences and nursing. The completion of the general course offerings required of all students of the College—plus selected academic and professional courses—requires four academic years (full-time enrollment is required during the Nursing major). As an integral part of each Nursing course, the learning process is extended from the College to a variety of health agencies which include: The Baltimore County Department of Health; The Children's Hospital, Inc.; Good Samaritan Hospital; Greater Baltimore Medical Center; Saint Joseph Hospital; Sheppard and Enoch Pratt Hospital and Stella Maris Hospice.

Requirements for Matriculation in the Nursing Major

1. In addition to students initially enrolling at Towson State College, eligible persons transferring from other two- and four-year educational institutions, as well as those seeking a second baccalaureate degree, may seek acceptance into the Nursing major.

Presently, the Department of Nursing is unable to offer Registered Nurses seeking a baccalaureate degree challenge opportunities for academic credit for previous nursing education and experience. The earliest date anticipated for the latter is September 1974. Meanwhile, Departmental Faculty will be happy to advise Registered Nurses concerning lower division course requirements should they wish to pursue study at the College on either a full-time or part-time basis.

ALL STUDENTS WISHING TO PURSUE THE NURSING MAJOR SHOULD CONTACT THE DEPARTMENT OF NURSING, ADMINISTRATION BUILDING, ROOM 134, AT THE TIME OF APPLICATION FOR ADMISSION TO THE COLLEGE TO COMPLETE THE "PRE-NURSING INFORMATION FORM." (The absolute deadline for the above is *October 1st* of the Semester preceding matriculation in the Nursing major and enrollment in NURS 55.221.)

2. Enrollment at the high school level in the following courses is strongly recommended to provide the foundational base for pursuance of the Nursing major: Mathematics—3 units including two years of Algebra; Chemistry—1 unit; Biology—1 unit and Physics—1 unit.

3. Admission to the College as a full-time student. (Although students do not enroll in the first Nursing course until the Spring Semester of the Sophomore year, persons wishing to pursue the major are urged to seek admission to the College at least by the previous September. Where this is not possible, the Department of Nursing must be informed *in writing* by *October 1st* that the student has filed for College admission for February and desires to be considered for acceptance into the Nursing major that same Semester.) ADMISSION TO THE COLLEGE DOES NOT CONSTITUTE OR GUARANTEE ACCEPTANCE INTO THE NURSING MAJOR. Acceptance into the Department of Nursing can be granted only by the Faculty teaching in the Nursing major.

4. Review of student credentials by Departmental Faculty (these reviews are completed from mid-October through early November annually) which include:

- a. evidence of successful completion of and/or satisfactory progress in the lower division courses specified in the Curriculum Plan which follows;
- b. evidence of a cumulative grade point average of at least 2.0 on a 4.0 scale;
- c. evidence of sound health status for pursuance of the major; this to be documented by submission of an appropriate medical examination form (College and/or Departmental) from a practicing physician, together with other reports deemed necessary;
- d. student interview data as compiled by Departmental Faculty;

* Please refer to the course descriptions for the definitions of episodic and distributive nursing care.

- e. evidence of October 1st or earlier notification to the Department of intent to pursue the major.

DUE TO EXISTING AND ANTICIPATED FUTURE LIMITATIONS IN NUMBERS OF FACULTY AND CLINICAL OPPORTUNITIES, THE DEPARTMENT MAY NOT BE ABLE TO GRANT ACCEPTANCE TO ALL STUDENTS MEETING THE ABOVE CRITERIA. STUDENTS ARE, THEREFORE, ADVISED TO SEEK ALTERNATIVE ENROLLMENT OPPORTUNITIES IN OTHER FOUR-YEAR NURSING PROGRAMS.

The Curriculum Plan for the Nursing Major

1. Lower Division Course Requirements

FRESHMAN YEAR *First Semester*: ENGL 30.102 Freshman Composition (3); BIOL 14.101 Contemporary General Biology (4); CHEM 22.101 General Chemistry (4); SPCH 84.131 Fundamentals of Speech Communication (3); PHED 009-059 Physical Education (student selection) (1), totalling 15 hours; *Second Semester*: MATH 50.115 (3); BIOL 14.315 Medical Microbiology (4) or BIOL 14.318 Microbiology (4); PSYC 70.101 General Psychology (3); CHEM 22.102 General Chemistry (4); ELECTIVE from areas of Art, Drama, English, Modern Languages, Music or Philosophy and Religion (3), totalling 17 hours; for the SOPHOMORE YEAR *First Semester*: BIOL 14.113 Human Anatomy and Physiology (4); SOCI 80.101 Introduction to Sociology (3); ENGL (student selection) (3); PSYC 70.203 Human Growth and Development (3); ELECTIVE from areas of Economics, Geography, History or Political Science (3), totalling 16 hours; *Second Semester*: BIOL 14.114 Human Anatomy and Physiology (4); HEAL 38.204 Nutrition (3); SOCI 80.203 The Family (3); NURS 55.221 Introduction to Professional Nursing Practice (4); ELECTIVE from areas of Economics, Geography, History or Political Science (3), totalling 17 hours.

2. Upper Division Course Requirements

JUNIOR YEAR *First Semester*: NURS 55.311 Distributive Care: Contemporary Family Health Care (4); NURS 55.312 Episodic Care: Contemporary Family Health Care (9); ELECTIVE from the areas of Art, Drama, English, Modern Languages, Music or Philosophy and Religion (3), totalling 16 hours; *Second Semester*: NURS 55.321 Distributive Care: Acute-Chronic Health Problems (4); NURS 55.322 Episodic Care: Acute-Chronic Health Problems (9); ELECTIVE from areas of Art, Drama, English, Modern Languages, Music or Philosophy and Religion (3), totalling 16 hours; for the SENIOR YEAR *First Semester*: NURS 55.411 Distributive Care: Complex Community Health Problems (4); NURS 55.412 Episodic Care: Complex Clinical Situations (9); PSYC 70.431 Group Dynamics (3) or SOCI 80.410 Small Groups (3), totalling 16 hours; *Second Semester*: NURS 55.421 Advanced Distributive Care (4) or NURS 55.422 Advanced Episodic Care (4); NURS 55.423 Nursing Leadership (9); SOCI 80.392 Demography (3), totalling 16 hours. The Nursing courses must be completed in a sequential pattern because each course is foundational for the subsequent ones.

Academic Standards

In order to remain in the Nursing major and to graduate from it, the student must maintain a grade of "C" (2.0) or better in each Nursing course (in addition to attaining the cumulative grade point average required by the College).

Program Approval

Development of the curriculum in the Nursing major was based on guidelines from the Maryland State Board of Examiners of Nurses and the National League

for Nursing. The State Board granted approval for the initiation of the curriculum. After graduation of the first class from the major, the Departmental Faculty will seek final approval of the program from the Maryland State Board of Examiners of Nurses and accreditation from the National League for Nursing.

Students graduating from the Nursing major will be eligible to write the State Board examination for licensure as a Registered Nurse in the State of Maryland.

Financial Aid and Special Obligations

Federal Nursing Student Scholarship and Loan Funds and other sources of assistance are available to eligible students. Information may be obtained from the College's Office of Financial Aid.

Enrollees in the Nursing major are expected to:

a. carry student nurses' liability insurance through an insurance company selected by the Departmental Faculty and endorsed by the American Nurses' Association (approximately \$10.00 annually);

b. purchase appropriate clinical attire initially selected by students in the Nursing major and Departmental Faculty (approximately \$200.00 for total program);

c. provide travel to and from clinical facilities.

NURSING COURSES (NURS)

Lower Division — Undergraduate

55.221 INTRODUCTION TO PROFESSIONAL NURSING PRACTICE (4) This course concentrates on developing intellectual skill in the assessment, nursing intervention and instruction of health maintenance for man and society. Attention is given to selected forces which alter the well being of man followed

by study and observation of man's adaptive behaviors to biological, psychosocial and environmental changes. Selected historical perspectives in nursing are included. Prerequisite: acceptance into Nursing major by Departmental Faculty.

Upper Division — Undergraduate

55.311 DISTRIBUTIVE CARE: CONTEMPORARY FAMILY HEALTH CARE (4) This course concentrates on developing intellectual sensitivity to the changing developmental needs and conceptual role of the family and its members. Attention is given to the study and application of prevention and health maintenance concepts specific to each developmental stage from birth to young adulthood. Nursing practice takes place in a variety of environmental settings exclusive of hospital confinement. Prerequisite: 55.221.

concentrates on developing keen intellectual sensitivity to the nurturing needs of individuals within society. Emphasis is on the prevention of acute-chronic diseases and the maintenance of health for people from young adulthood to senescence. Nursing practice is directed toward the continuous care of persons not confined to hospitals. Prerequisite: 55.311 and 55.312.

55.312 EPISODIC CARE: CONTEMPORARY FAMILY HEALTH CARE (9) Course emphasis is on the application of a defined scope of scientific knowledge and skill unique to curative and restorative nursing care of hospitalized patients from birth through young adulthood. This course is taken concurrently with the course 55.311 to provide comprehensive study in applying nursing practice to the dynamic needs of persons of the aforesaid age groups in various environmental settings. Prerequisite: 55.221.

55.322 EPISODIC CARE: ACUTE-CHRONIC HEALTH PROBLEMS (9) Course emphasis is on the application of a defined scope of scientific knowledge and skill specific to curative and restorative nursing care of hospitalized patients with acute or chronic health problems. This course is taken concurrently with the course 55.321 to provide comprehensive study in dynamic, progressive nurse-patient care in various hospital settings. Prerequisite: 55.311 and 55.312.

55.321 DISTRIBUTIVE CARE: ACUTE-CHRONIC HEALTH PROBLEMS (4) This course con-

55.411 DISTRIBUTIVE CARE: COMPLEX COMMUNITY HEALTH PROBLEMS (4) This course offers study in the inter-relationship and application of nursing intervention specific to multi-faceted health problems within contemporary urban and suburban settings. Attention is given to the nurse

an interdisciplinary health team member who provides psycho-social, as well as physical care to individuals and families. Prerequisite: 55.321 and 55.322.

55.412 EPISODIC CARE: COMPLEX CLINICAL SITUATIONS (9) This course focuses on comprehensive knowledge of human behavior, technology and procedures. Concentration is judiciously applied to curative and restorative care of patients with complex health problems and confined to general or psychiatric health care institutions. Prerequisite: 55.321 and 55.322.

55.421 ADVANCED DISTRIBUTIVE CARE (4) This course offers further study and increased competence in nursing practice. Emphasis is on health maintenance and disease prevention for persons not confined to health care institutions. According to interest, the student selects the environmental setting and the particular individual-group health problems for independent study. Prerequisite: 55.411 and 55.412.

55.422 ADVANCED EPISODIC CARE (4) This course offers further study and increased competence in nursing practice. Emphasis is on curative and restorative care for hospitalized persons with acute-chronic physio-

logic and psychiatric problems. According to interest, the student selects the clinical setting and the particular individual-group problem for independent study. Prerequisite: 55.411 and 55.412.

55.423 NURSING LEADERSHIP (9) The focus of this course is on the study of cross-relationships between human relations and organizational effectiveness for the delivery of health care. Attention is given to leadership skills, professional ethics, legal boundaries, the economics of health services and citizenship. Prerequisite: 55.411 and 55.412.

NOTE: DISTRIBUTIVE CARE is the area of concentration in nursing practice which emphasizes that aspect essentially designed for health maintenance and disease prevention. This is generally continuous in nature, seldom acute and increasingly will take place in community or emergent institutional settings.*

EPISODIC CARE is the area of concentration in nursing practice which emphasizes that aspect essentially curative and restorative, generally acute or chronic in nature, and most frequently provided in the setting of the hospital or in-patient facility.*

* National Commission for the Study of Nursing and Nursing Education, *An Abstract for Action* (New York: McGraw-Hill Book Company, 1970), pp. 91 and 92.

Philosophy and Religion

Professors: EBERHARDT (Chairman), MADDEN

Associate Professor: HILL

Assistant Professors: deBRABANDER, FUCHS, MURUNGI

Instructor: ROBERTSON

Courses offered by the Department are historical, systematic, analytic, or speculative, according to the nature of the course, the interests of the instructor, and the composition of the particular class. The attitude that informs all courses is scholarly or speculative, rather than sectarian or dogmatic.

Requirements for the Major and Minor

Basic Requirements: 58.101 Introduction to Philosophy, 58.203 Logic, 58.403 Ethics. And four courses from the following—58.321 Pre-Socratic and Classical Greek Philosophy, 58.322 Late Classical and Medieval Philosophy, 58.323 Renaissance to 17th Century Philosophy, 58.324 18th and 19th Century Philosophy, 58.325 Schools of Contemporary Philosophy, or 58.326 American Philosophy.

Additional requirements for the minor: All of the above, plus any other term course (3 credits) for a total of 24 credits.

Additional requirements for the major: In addition to the above basic requirements, four other term courses (12 credits) including at least two term courses in the 409 or 411 series are required. Two term courses (6 credits) may, with the permission of the Chairman, be taken in allied disciplines, e.g., history, mathematics, political theory, psychology, religion. In exceptional instances students may, with permission, make substitutions for required courses, e.g., a higher numbered course may be substituted for a lower numbered course.

Note: Courses numbered 409 (Philosophical Systems) and 411 (Philosophical Problems or Topics) may be taken in two or more terms provided the subject matter of the course differs. The subject matter of courses 409 and 411 will be indicated by the subtitle in the Schedule of Courses issued each term by the Registrar's Office. For example, 58.409: Philosophical Systems: Plato, and 58.409: Philosophical Systems: Kant, might both be taken for credit in the same or different terms, the difference in the content of the courses being indicated on the student's transcript by the different subtitles of the courses.

Lower Division — Undergraduate

58.101 (101) INTRODUCTION TO PHILOSOPHY

(3) An introduction to some fundamental problems of philosophy and to various proposals for the solution of these problems.

58.203 (203) LOGIC (3)

Study of and practice in inductive and deductive reasoning, the composition of argument, and demonstration,

and the detection of logical and non-logical fallacies.

58.207 (207) PHILOSOPHICAL PERSPECTIVE

(3) The course will consider contemporary issues from the uniquely philosophical perspective in order to stimulate independent reflection on the part of the student.

Upper Division — Undergraduate and Graduate

58.301 (301) PHILOSOPHIES OF INDIA (3)

Examination of some major philosophical systems through selected writings in translation. Prerequisites: One course in philosophy or consent of instructor.

58.302 (302) PHILOSOPHIES OF CHINA AND JAPAN (3)

Examination of some major philosophical systems through selected writings in translation. Prerequisites: One course in philosophy or consent of instructor.

58.321 (321) PRE-SOCRATIC AND CLASSICAL GREEK PHILOSOPHY (3)

58.322 (322) LATE CLASSICAL AND MEDIEVAL PHILOSOPHY (3)

(Should not be attempted without having taken 58.101 or 58.321.)

58.323 (323) RENAISSANCE TO 17TH CENTURY PHILOSOPHY (3)

(Should not be attempted without having taken 58.101 or 58.321.)

- 58.324 (324) 18TH AND 19TH CENTURY PHILOSOPHY (3) (Should not be attempted without having taken 58.101 or 58.321.)
- 58.325 (325) SCHOOLS OF CONTEMPORARY PHILOSOPHY (3) A survey with varying emphases on a number of such contemporary philosophical positions as pragmatism, phenomenology, logical positivism, the analysts, neo-Aristotelianism, the philosophers of science, and the existentialists. (Should not be attempted without having taken 58.101 or 58.321.)
- 58.326 (326) AMERICAN PHILOSOPHY (3) A study of the main currents of American philosophical thought as exemplified in such writers as Edwards, Emerson, Peirce, James, Royce, Dewey and Whitehead. (Should not be attempted without having taken 58.101 or 58.321.)
- 58.354 (453) PHILOSOPHY OF BIBLICAL LITERATURE: OLD TESTAMENT (3) Major themes of the Biblical Literature, and of its religious, philosophical and cultural implications.
- 58.401 (401) THEORY OF KNOWLEDGE (3) An historical and systematic approach to the truth value and elements of the forms of human knowledge. The theories of major philosophers will be studied.
- 58.403 (403) ETHICS (3) Analysis of reading from the principle classical and contemporary ethical sources; study of the basic moral concepts as found in these sources; application to contemporary moral concerns.
- 58.405 (405) AESTHETICS (3) An analytic and historical examination of concepts of the nature of art, beauty, aesthetic value, aesthetic perception, and of the modes of existence of artifacts.
- 58.409 (409) PHILOSOPHICAL SYSTEMS (3) The study of a major philosophical system or position, classical or modern, and of its important proponents. Prerequisites required: 58.203, one other lower level course in philosophy, and consent of the Department.
- 58.411 (411) PHILOSOPHICAL PROBLEMS (3) A consideration of one of the perennial interests of philosophy. Prerequisites required: 58.203, one other lower level course in philosophy, and consent of the Department.
- 58.421 (421) ARCHAEOLOGY OF PALESTINE AND TRANS-JORDANIA (3) A study using audio-visual aids of the aims, techniques and artifacts of biblical archaeology. Research exercises may require the use of museums, collections and libraries. Prerequisites: 58.461 or, any introductory course in Geography, History, Philosophy or, Consent of Department.
- 58.451 (451) PHILOSOPHY OF RELIGION (3) Exposition of various approaches to the philosophy of religion with an analysis of the major issues on which they differ and agree.
- 58.454 (454) PHILOSOPHY OF BIBLICAL LITERATURE: NEW TESTAMENT (3) Major themes of the Biblical Literature, and of its religious, philosophical and cultural implications.
- 58.455 (455) HELLENISTIC ERA (3) Three significant phases of the preparation of the Mediterranean world for the Hebraic-Hellenic synthesis: (1) Judaism, (2) Hellenism, and (3) the Roman conquest. Contribution of archeology will be indicated.
- 58.457 (457) COMPARATIVE RELIGION I (3) Examination of Eastern religions, culture and life—Hinduism, Buddhism, Confucianism, Taoism, Shinto. Prerequisites: At least one lower division course in Philosophy, Religion or History.
- 58.458 (458) COMPARATIVE RELIGION II (3) Examination of the religious life and culture of the Near East and Africa. Prerequisites: At least one lower division course in Philosophy, Religion or History.
- 58.459 (459) PROTESTANT, CATHOLIC, JEW (3) Judaism and Christianity. A study of their biblical, historical and cultural sources.
- 58.461 (461) HISTORICAL GEOGRAPHY OF PALESTINE (3) The course seeks to assess the role of geographical and historical disciplines (the provenance), used conjointly, in biblical interpretation. Prerequisites: Any introductory course in Geography, History or Philosophy or, Consent of Department.
- 58.471 (471) THE IDEA OF WOMAN IN PHILOSOPHY (3) Course will study various concepts which philosophers have used to define woman. An historical approach with readings by philosophers such as Plato, Aristotle, Schopenhauer, and ending with Beauvoir. Prerequisites: Any lower level course in Philosophy or, Consent of Department.
- 58.495 (495) RESEARCH TUTORIAL IN PHILOSOPHY (3) Directed readings and research leading to a thesis paper under one or more members of The Department. Open only to philosophy majors or students with demonstrated competency and having senior standing.

Physical Education

Men's Department

Professors: SHEETS

Associate Professors: KILLIAN, MEINHARDT, SLEVIN, ZEIGLER (*Chairman*)

Assistant Professors: ANGOTTI, FIELD, McDONALD, McGINTY, RIORDON, RUNK, FORBES, STINAR

Instructors: ALBERT, GIOVANDO, BRITT

Women's Department

Professor: BIZE (*Chairman*), CONARD

Associate Professors: EASON, KELLY, MYRANT, ROACH, VERKRUZEN

Assistant Professors: BLANN, BOUTON, HARRIS

Instructors: BOUCHER, DUNCAN, FAULKNER, FINCH

Visiting Professors: CLEAVES, WALTER

Program for Non-Majors

Service Division

The program of physical education is planned to provide the student with an opportunity to acquire the skills and understanding of selected physical activities. Emphasis is placed on the development of sufficient competence to promote satisfaction and enjoyment in sports and recreational activities. To meet the general course requirements of all students in Group IV, a minimum of one credit must be taken from 011-059 (60-coed, 61-men, 62-women) course offerings. Students with medically screened physical limitations may elect adapted physical education (60.009). Activity courses may be taken each semester of the student's academic career.

A partial list of course offerings follows: 009 Adaptive-Modified; 011 Archery; 013 Badminton; 015 Baseball; 017 Basketball; 019 Body Mechanics; 020 Bowling; 021 Conditioning; 023 Fencing; 025 Field Hockey; 027 Folk Dance; 029 Football; 031 Golf; 033 Gymnastics; 035 Handball; 036 Lacrosse; 037 Modern Dance; 039 Movement Fundamentals; 040 Rhythmic Fundamentals; 041 Soccer; 042 Jazz Dance; 043 Softball; 045 Swimming I; 046 Swimming II; 047 Swimming III; 049 Synchronized Swimming; 051 Senior Life Saving; 052 Water Safety Instructor; 053 Tennis; 055 Track and Field; 057 Volleyball; and 059 Wrestling.

Non-Major students may apply for credit by examination for prior experience or skill by contacting the respective chairperson for college and Departmental procedures.

Elementary Education — Physical Education Division

101-102 PHYSICAL EDUCATION FOR ELEMENTARY EDUCATION STUDENTS The course is designed for the teacher of elementary school children to gain an understanding of and develop a basic ability in the basic skills of children's activities. The course provides opportunity to become familiar with methods of learning skills and to appreciate the needs of the individuals in motor learning and

analysis of group behavior. Prerequisites to 60.324.

324 Special sections of The Teaching of Physical Education in the Elementary School may be selected by students in the elementary education block program. The course is designed to give the student knowledge and practical experience in teaching the elementary child. Prerequisites: 101-102.

Program for Physical Education Majors

Students may select a major in physical education. The purpose of the major is to prepare competent teachers of physical education for the public schools of

Maryland. Graduates are certified to teach at the elementary and secondary level. A planned sequence of courses is designed to provide the student with skills and leadership experiences needed to direct a balanced program in class, intramural and extramural activities, and varsity sports. All men physical education majors are requested to serve two semesters as a member of an intercollegiate team or serve an equivalent time in the athletic training or intramural programs.

A physical education major takes the general college requirements, and must complete Physics, Biology and Human Anatomy and Physiology. Additional requirements are listed below. A total of thirty-eight to forty credit hours of physical education is required for a major in physical education.

	Course No.	Cr.	V. Physical Education		
I. <i>Biology</i>			<i>Theory — Men and Women</i>		
Human Anatomy and Physiology	14.113-144	8	Overview of Physical Education	199	2
II. <i>Psychology</i>			Curriculum in Physical Education	203	3
General Psychology	70.101	3	Organization & Administration	303	3
Educational Psychology	70.201	3	Tests & Measurements	309	3
III. <i>Health</i>			Kinesiology	311	3
Current Health Problems	38.101	3	Physiology of Exercise	313	2
First Aid	38.103	1	*Care & Prevention of Athletic Injuries	315	2
Health Education in the School I	38.201	3	*Coaching & Officiating	321-322	1-1
IV. <i>Education</i>			Teaching Physical Education in the Elementary School	324	2
Introduction to Teaching	27.101	1	Teaching Physical Education in the Secondary School	325	2
Student Teaching			Principles and Problems of Physical Education	401-402	2-2
Elementary	26.497	7	**Adaptive Physical Education	423	2
Secondary	27.398	7			
Survey of Education	28.319	3			
Foundations of Education	27.401	2			
Laboratory in New Educational Media	13.369	1			
* Required (men); Elective (women)					
** Required (women); Elective (men)					

Professional Laboratory Skills

Professional laboratory skill courses (103-159) (0.5-1.0) provide instruction in the basic activities appropriate for a teacher of physical education, including acquisition of skills and methods of instruction. Twelve credits are required.

Lower Division — Undergraduate

MEN (<i>Required</i> — all courses are .5 credits).....			9 credits
106-157	Badminton-Volleyball	130	Gymnastics I
107-143	Baseball-Softball	131	Gymnastics II
109	Basic Rhythms	133	Lacrosse
111	Basketball	141	Soccer
116	Conditioning	*145	Swimming I
118	Elementary Games	*146	Swimming II
124	Folk Dance	153	Tennis
126	Football	155	Track & Field
128	Golf	159	Wrestling
MEN (<i>Elective</i> — six courses)			3 credits
103	Archery	135	Modern Dance
112	Basketball II	137	Social Dance
113	Body Mechanics	151	Senior Life Saving
114	Bowling	*147	Swimming III
128	Golf II	**152	Water Safety Instructor
132	Gymnastics III	148	Water Polo
140	Handball	153	Tennis
139	Jazz Dance		

WOMEN (*Required* — all courses are .5 credits)..... 9 credits

- | | |
|----------------------|-------------------|
| 103 Archery | 131 Gymnastics II |
| 105 Badminton | 133 Lacrosse |
| 109 Basic Rhythms | 135 Modern Dance |
| 111 Basketball | 141 Soccer |
| 113 Body Mechanics | 143 Softball |
| 118 Elementary Games | *145 Swimming I |
| 122 Field Hockey | 153 Tennis |
| 124 Folk Dance | 155 Track & Field |
| 130 Gymnastics I | 157 Volleyball |

WOMEN (*Elective* — six courses) 3 credits

- | | |
|--------------------|-------------------------------|
| 112 Basketball II | 136 Modern Dance II |
| 114 Bowling | 137 Social Dance |
| 120 Fencing | *146 Swimming II |
| 128 Golf I | *147 Swimming III |
| 129 Golf II | *149 Synchronized Swimming |
| 132 Gymnastics III | 151 Senior Life Saving |
| 139 Jazz Dance | **152 Water Safety Instructor |
| | 154 Tennis II |

Total of 12 credits required

*Students will be screened through the use of placement tests and assigned to aquatic courses (145 through 152) according to individual ability.

**1.0 credit

Professional Theory Courses

- 199 OVERVIEW OF PHYSICAL EDUCATION (2)
A brief history of physical education emphasizing the place of physical education in education today, identification of leaders in the field, the role of professional ethics and standards, professional organizations (their purpose and function), and an introduction to professional literature.
- 203 CURRICULUM IN PHYSICAL EDUCATION (3)
Physical education as a part of general education, aims and content. Principles for development of a sequential physical education curriculum in grades one through twelve.
- 205 CAMP LEADERSHIP (2)
The role of the camp counselor in organized camping. Emphasis on camp related skills of campcraft, trips, crafts and nature study. Several field trips.

Upper Division — Undergraduate

- 301 RECREATION (3)
Preparation for leadership and organization of after-school activities for children, such as club, hiking, camping and playground activities. Visits to recreation centers. Specialists in story telling, crafts, recreational singing, playground and club work give part of the course. Participation in some organized recreation with children.
- 303 ORGANIZATION AND ADMINISTRATION (3)
Investigation of policies and procedures in the organization and administration of physical education. Areas covered include facilities, equipment, budget, scheduling, special events, records, awards.
- 305 SCHOOL CAMPING AND OUTDOOR EDUCATION (2)
Aims, organization and administration, and program of the school camp.
- 309 TESTS AND MEASUREMENT IN PHYSICAL EDUCATION (3)
Background for development of measurement programs in physical education; elementary statistical procedures; interpretation of data; selection and administration of tests measuring strength, fitness, motor ability, and sports skills applicable to various grade and age levels.
- 311 KINESIOLOGY (3)
Mechanical and anatomical analysis of movement in relation to human performance. Prerequisite: PhSc 64.-101 or 66.211, Biology 14.113-114.
- 313 PHYSIOLOGY OF EXERCISE (2)
Application of principles of physiology to large muscle activity, with special emphasis on the interrelations of muscular, nervous, circulatory, and respiratory functions during exercise. Prerequisite: Biology 14.113-114.
- 315 CARE AND PREVENTION OF ATHLETIC INJURIES (2)
Theoretical and practical methods of preventing and treating athletic injuries; techniques of taping and bandaging; emergency first aid; massage; use of physical therapy modalities. Prerequisite: Biology 14.113-114.
- 317 MODERN DANCE COMPOSITION (2, 3)
Approaches to composition through short studies directed toward a feeling of phasing and form in dance. To be offered as an elective for the physical education major or for any interested student. Prerequisite: Approval of instructor.
- 319-320 CHOREOGRAPHIC PROBLEMS (3, 3)
Studies on the intermediate level using Pre-Classical forms and modern idioms of dance. Problems involved in choreographing for solo, duet, and small group dances. Prerequisite: 317.

- 321-322 COACHING AND OFFICIATING (1, 1) Fundamentals, tactics, strategy, ethics and other factors in coaching and officiating sports. Prerequisite: Professional Laboratory Skills related to Team Sports.
- 324 TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (2) The focus of this course is the child-in-movement. Specific attention centers on individual and group progressions for a wide variety of movements, methods of organization, direct and problem-solving teaching methods, and motor development. Opportunities to observe and teach children are provided.
- 325 TEACHING PHYSICAL EDUCATION IN SECONDARY SCHOOLS (2) Course provides an extended period of observation-participation in a junior or senior high school. The course includes responsibilities of the secondary school physical education teacher,

teaching methods, lesson and unit planning, and topics resulting from the participation experience.

- 401-402 PRINCIPLES AND PROBLEMS OF PHYSICAL EDUCATION (2, 2) The application of knowledge derived from psychological, sociological and philosophical research findings about human movement to the teaching of physical education. The courses will emphasize research technique, individual projects and the synthesizing of information into logical foundations for teaching practices. Prerequisites: 199, 203.
- 403 ORGANIZATION AND ADMINISTRATION OF INTRAMURALS Course designed to permit the graduate and undergraduate student to acquire the skills of administration necessary in the development and organization of intramural programs in schools and colleges.

Upper Division — Undergraduate and Graduate

- 60.412 THEORY AND ANALYSIS OF GYMNASTICS MOVEMENT (3) Theoretical and practical application of mechanical analysis of movement concepts as related to proper execution of skills in gymnastics: The techniques and methods used in this course are designed to provide the teacher a logical system for presenting gymnastic skills to facilitate learning for the student; to demonstrate that gymnastic skills are logically founded on basic physics or terrestrial mechanics; to present aiding and spotting techniques.
- 60.419 SWIMMING AND POOL MANAGEMENT (3) An advanced course in teaching methods for all levels of swimming and diving. Modern methods of training the competitive swimmer with emphasis on technique and conditioning of the individual. The organization and administration of swimming pools and clubs with regard to staff, recreation and pool filtration. Prerequisites: Senior Lifesaving and Water Safety Instructors, or consent of instructor. This is a certifiable course for pool management, approved by the Department of Health, Baltimore County.
- 60.421 PHYSICAL EDUCATION PROGRAM IN THE ELEMENTARY SCHOOLS (3) Aims of the physical education program, trends in methods, materials and curriculum. Current issues and research concerned with elementary school physical education programs.
- 60.423 ADAPTIVE PHYSICAL EDUCATION (2) Recognition of pupils with physical deviations, and use of special or modified physical education activities. Prerequisite: 311.
- 60.425 MODERN DANCE IN SECONDARY SCHOOL (3) Dance techniques and elements of composition for the secondary school teacher. Not open to those who have taken Modern Dance Composition. Prerequisite: Approval of instructor (Offered only in evening and summer)

- 60.430 MOVEMENT EDUCATION IN THE ELEMENTARY SCHOOL (3) Application of problem solving and individualized methods to teaching of movement for the elementary school child. Development materials for teaching creative dance, games, sports. Survey of current literature.
- 60.441 THE SPORTSWOMAN IN AMERICAN SOCIETY (3) The purpose of this course is to examine the American woman in sport. Literature from the historical, physiological, sociological, psychological and philosophical perspective will be reviewed. Concepts revealed will be contrasted with myths about and societal attitudes toward women who participate in sport. Prerequisites: Phed 203 and 303, or permission of instructor.
- 60.453 ORGANIZATION AND ADMINISTRATION OF ATHLETICS (3) Designed to aid those persons responsible for organizing and administering intramural and interschool athletic programs. Topics such as organizational patterns, objectives of the programs, controls, game management, records, conduct of tournaments, officials, awards, and means of promoting the programs will be considered. Study will be made of competitive as well as informal recreation programs on all educational levels, with special emphasis on the secondary schools.
- 60.485 SELECTED TOPICS IN PHYSICAL EDUCATION (3) Workshop designed for study of special topics of current interest in physical education and athletics. Content varies and will focus on substantive material or operational problems.
- 60.509 PSYCHOLOGY OF MOTOR LEARNING (3) Investigation of the various psychological factors that affect the acquisition of motor skills. Emphasis will be focused on teaching and practice methodology, motivational factors, learning theories, physical and motor considerations, anxiety, stress,

tension, competition, mental practice, transfer of training, level of aspiration, etc. Prerequisite: Bachelor's degree with a major in Physical Education.

60.512 SIGNIFICANT PERIODS IN PHYSICAL EDUCATION (3) An examination of the influence of Greek, Roman, European and English concepts of physical education upon American physical education. Emphasis on the formation and development of American concepts of physical education.

60.513 ANALYSIS OF PHYSIOLOGICAL CONCEPTS (3) Analysis of research and laboratory application of the physiological factors that affect human efficiency before, during and after exercise. Factors to be investigated include: metabolism, circulation-respiration, muscular physiology, endocrine system, ergogenic aids, environmental factors, etc. Prerequisite: Consent of department chairman.

60.530 MECHANICAL ANALYSIS OF MOVEMENT (3) Various basic mechanical principles are analyzed as they relate to efficient human movement. The physical laws to be studied are leverage, motion, projectiles, gravity, buoyancy and equilibrium. The design of the course will be research oriented. Prerequisites: Kinesiology and an undergraduate major in Physical Education or consent of the department chairman.

60.533 ADMINISTRATION AND SUPERVISION OF PHYSICAL EDUCATION (3) Designed to acquaint the student with the scope, problems and techniques of administering and supervising a program of physical education. The work of the chairman of the department, problems of personnel, program, facilities, and evaluation will be discussed. Prerequisite: Undergraduate degree in Physical Education and consent of instructor.

60.539 CRITICAL ANALYSIS OF CURRENT LITERATURE (3) Designed to facilitate the depth and quality of the knowledge of students, teachers, administrators, supervisors and research personnel in their assessment and investigation of the following aspects of the physical education profession: contemporary leaders, books, journals, periodicals, projects, trends, issues, innovations, etc.

Prerequisite; Undergraduate degree in physical education or consent of department chairman.

60.541 EVALUATIVE TECHNIQUES IN PHYSICAL EDUCATION (3) Designed primarily to develop analytical ability in the administration, assessment and interpretation of test results. Research and laboratory application involves the evaluation of measurements of classification indexes, power, agility, motor ability, balance, flexibility, kinesthetic perception, speed and recreation time, strength, muscular endurance, cardiovascular condition, sport skills, etc. Prerequisites: Undergraduate major in physical education.

60.545 FACILITIES AND EQUIPMENT FOR PHYSICAL EDUCATION (3) Designed to cover the principles of programming and planning facilities for physical education. Indoor and outdoor activity areas will be studied as well as their maintenance. Procedure related to selection, purchase and care of equipment will be included. Prerequisite: Undergraduate degree with a major in Physical Education or consent of the department chairman.

60.547 RESEARCH SEMINAR IN PHYSICAL EDUCATION (3) Research on a project of particular significance to the individual through consultation with designated faculty members. Focus will be on the experimental design and the proper structural format for project or thesis formulation. Prerequisite: Consent of department chairman.

60.551 COMPARATIVE PHYSICAL EDUCATION—CONTEMPORARY AND INTERNATIONAL (3) A comparative analysis of contemporary patterns of physical education in selected countries throughout the world. Prerequisite: Undergraduate major in physical education or consent of the department chairman.

60.553 CONTEMPORARY PHYSICAL EDUCATION CURRICULUM (3) Curriculum design for elementary and secondary school physical education. Examination of current literature pertinent to aims, objectives, content, and method of physical education. Prerequisites: Teaching experience, undergraduate physical education major or permission of instructor.

Physics Department

Professors: BAREHAM, COX, NEWMAN (Co-Chairman), PELHAM (Co-Chairman)

Associate Professors: HUANG, JOHNSON, MOOREFIELD, RUBENDALL

Assistant Professors: CHEN, GREENE, KREISEL, LOH, MOLITOR, UKENS, ZIPFEL

The Department offers two majors programs, physics and natural science, and many other service courses in liberal art's physics, and science education.

Physics Major

The major program is designed to meet the needs of three groups of students, those planning (1) to be physics teachers in the secondary schools, (2) to enter graduate study in physics, environmental science, mechanics, oceanography, geophysics or other applied physics, and (3) to be physicists in industry, government, and other non-teaching professions. The last two groups are classified as regular physics major and the first group is classified as physics teacher major. Their respective requirements are expressed in the following:

Regular Physics Majors: 66.221, 222 (or 66.211, 212); 66.301; 66.305; 66.311; 66.313; 66.321; any two of 66.385, 386, 387; 66.401; 66.471 (35 credits of physics); 50.373.

Physics Teacher Majors: 66.221, 222 (or 66.211, 212); 66.311; any two of 66.385, 386, 387; 66.302 or 66.321; 66.301 or 66.305; 66.401 (28 credits of physics).

The above majors are required to have the following non-physics courses: 50.273, 274 (calculus); 22.103, 104 or 22.103 and 14.101.

Physics teacher major students need to take 22 semester hours of education courses. Students who intend to be physics majors should see one of the following instructors, Newman, Loh, Huang, Greene, and Zipfel, during the early part of their education in this College.

For the above majors 12 credits of upper division Physics courses must be taken in this department.

A Suggested Schedule for Physics Majors

For Freshmen who had algebra, trigonometry, and analytic geometry in high school, it is highly recommended to take PHYS 66.221-222 (or 211-212) and MATH 50.273-274 in their first year. Other students may take the following kind of schedule.

First Year: 1st Semester: Chemistry 22.101 or 103 (4), Mathematics 50.115 or 119 (3), English 30.102 or 104 (3), German 36.101 or Russian 74.101 (3), Speech 84.101 or Elective from General Education Requirements (2 or 3); total of 15 or 16 credit hours. 2nd Semester: 22.102 or 104 (4), 50.116 or 273 (3 or 4), English elective (3), German 36.102 or Russian 74.101 (3), Elective from General Education Requirement (3); total of 16 or 17 credit hours.

Second Year: 1st Semester: General Physics 66.221 (4), Biology 14.101 (4), Mathematics 50.273 or 274 (4), Elective from General Requirements (4 or 5); total of 16 or 17 credit hours. 2nd Semester: General Physics 66.222 (4), Mathematics 50.274 or 373 (4), Health or Physical Education Requirements (1 or 3), Elective (6); total of 15, 16, or 17 credit hours.

Third Year: 1st Semester: Mechanics 66.301 (4), Mathematic Physics 66.321 (3), Electricity and Magnetism 66.305 (4), Advanced Lab 66.385-387 or Basic Electronics 66.335 (3), Electives from General Requirements (1 to 3); total of 15, 16, or 17 credit hours. 2nd Semester: Thermodynamics 66.302 (3), Modern Physics 66.311 (4), Advanced Lab 66.385-387 or Basic Electronics 66.335 (3), Electives (6 or 7); total of 15 or 16 credit hours.

Fourth Year: 1st Semester: Physics Seminar 66.401 (1), Physical Optics 66.411 (3), Quantum Mechanics 66.471 (3), Other Electives (9); total of 16 credit hours. 2nd Semester: Advanced Lab 66.385-386 or Electronics 66.437 (3), Statistical Mechanics 66.472 (3), Other Electives (10); total of 16 credit hours.

Students planning to teach in public schools (physics teacher majors) may schedule the required education courses (22 credits) in the 3rd or 4th year. The electives must be chosen to satisfy the total 128 semester hours College Requirements. Students should beware that most of the advanced physics courses (300 and 400 levels) may be offered in either the first semester or the second semester, but not in both semesters. Usually General Physics 66.211 (or 221) is also offered in the second semester and 66.212 (or 222) in the first semester. Students should plan their schedules according to the offering in each semester. It is the responsibility of the student to plan his program so that he may complete all requirements before graduation.

Physics Minor

The requirements for physics minor are 20 credits in physics courses including PHYS 66.211-212 (or 221-222), 301, 311. For further information consult Department Chairmen.

Natural Science Major

The program is designed to give a broader view of the sciences than is obtained in a traditional undergraduate major in a single science. This is done at the sacrifice of depth and students should therefore be aware that this major may not prepare them for graduate work in a single science. Course requirements are: BIOLOGY 14.101, 105, 109; CHEMISTRY 22.101-102; one course either 210, 211, 230, or 231; MATHEMATICS 50.115; PHYSICAL SCIENCES 64.121, 211; PHYSICS 66.211-212 (or 212-222); BIOLOGY 14.291 or 14.491 or PHYSICAL SCIENCES 64.401; biological or physical sciences electives (including one field course) for eleven credit hours, for a total of 54 hours in physical sciences, biological sciences and mathematics.

Prospective secondary school teachers of general science should elect this major. Students should plan their programs to meet the certification requirements of the area in which they plan to teach.

PHYSICS COURSES (PHYS)

Lower Division — Undergraduate

66.001 THE PHYSICS OF SOUND AND MUSIC (3) Study of sound and its production by various instruments (human voice included) in terms of basic physical concepts to be introduced. Physical interpretations will be given of pitch, loudness, harmonics and timbre, scales and temperament, etc. Other topics to be treated on an elementary level include: the mechanics of the inner ear, acoustics, electronic production and reproduction. Two lecture hours and one two-hour laboratory period.

66.002 AIR POLLUTION (3)

66.101 GENERAL PHYSICS B (5) One semester General Physics with special emphasis on motion including kinematics and dynamics of linear and angular motion.

66.211-212 GENERAL PHYSICS I, II (4, 4) For Arts and Science, Biology, and Natural Science Majors: Mechanics, heat, light, elec-

tricity, magnetism and a brief introduction to modern physics. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 50.115, or good standing of high school algebra and trigonometry.

66.213 GENERAL PHYSICS A (5) One semester General Physics with special emphasis on geometric and physical optics, optical instruments, electricity and magnetism, ac and dc circuits, atomic and nuclear physics and fluid flow. Prerequisites: 50.115, 22.102 or 22.104.

66.221-222 GENERAL PHYSICS I, II (4, 4) For Chemistry, Mathematics, and Physics Majors: Mechanics, heat, light, electricity, magnetism and a brief introduction to modern physics. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 50.273 or concurrently.

66.295 COURSE RESEARCH IN 200-LEVEL COURSES

Upper Division — Undergraduate and Graduate

- 66.301 MECHANICS (4) Systems of coordinates and kinematic components of motion; Newtonian dynamics of particles and linear systems, including planetary motion and oscillations in damped and undamped systems; virtual work; generalized coordinates and Lagrange's equations; Hamilton's principle with elementary applications of least action, varying action and the canonical equations. Some nonlinear effects will be introduced. Four lecture hours. Prerequisite: PHYS 66.222 or 66.212. MATH 50.274.
- 66.302 THERMODYNAMICS AND KINETIC THEORY (3) Principles and laws of classical thermodynamics applied to simpler irreversible processes, including chemical, elastic, electric and magnetic phenomena; thermodynamic functions and Maxwell's relations; the conservation equations in elementary kinetic theory; fluctuations and irreversible transfer effects. This course may be taken concurrently with PHYS 66.212 or 66.222 by permission. Three lecture hours. Prerequisite: PHYS 66.212 or 66.222. MATH 50.274.
- 66.305 ELECTRICITY AND MAGNETISM (4) Theorems of Gauss and Stokes as applied to electrostatics and magnetostatics; diamagnetism and paramagnetism; steady and transient current effects; alternating currents; conduction in gases, photoelectricity; and electron theories of solid state phenomena; the classic treatment of Maxwell-Lorentz electromagnetic and propagation effects. And possibly the following topics will be included: the special theory of relativity; introduction to microwaves and wave guides; plasma physics and magnetohydrodynamics. Four lecture hours. Prerequisite: PHYS 66.212 or 66.222. MATH 50.274.
- 66.311 MODERN PHYSICS (4) The specific details of this course will be changed from time to time as necessitated by student interests and needs. In general, the intermediate principles and applications of relativity, quantum physics, elementary particles, nuclear physics and solid state theory will serve as the foundation for additional specialized developments of current interest. Four lecture hours. Prerequisite: PHYS 66.222 or 66.212. MATH 50.274.
- 66.313 HISTORY AND PHILOSOPHY OF PHYSICS (2) The works of Sarton, Cohen, Singer and Dampier on the history and significance of physical concepts. The philosophical concepts of Bridgeman, Russell, Heisenberg and other contemporaries interpreted in the historical development. Two lecture hours.
- 66.321 INTRODUCTORY MATHEMATICAL PHYSICS (3) As the mathematical maturity of the students will allow, selected topics will be examined such as the generalized expressions for forces and potentials, vector analysis, applications of Fourier series and complex variables, and solutions of the harmonic oscillator and wave equations. Three lecture hours. Prerequisite: PHYS 66.222 or 66.212, MATH 50.373 or concurrently.
- 66.335 BASIC ELECTRONICS (4) Circuit components, characteristics of semiconductors, electrical measurements, method of circuit analysis, electronic devices. Three lecture hours and one three-hour laboratory period. Prerequisite: 66.212 or 66.222 or consent of instructor.
- The following three, single-semester courses, called ADVANCED PHYSICS LABORATORY, may be taken independently subject to the requirements as specified for each. Three laboratory hours and three hours of independent work.
- 66.385 MECHANICS AND HEAT (3) Equilibrium of rigid bodies; moments of inertia; laws of angular motion; physical and torsional pendulums; servomechanisms; surface tension; vapor pressure and hygrometry; viscosity of fluids; continuous flow calorimetry; thermal conductivity; black-body radiation; acoustics. Prerequisite: PHYS 66.301 or concurrently.
- 66.386 MODERN PHYSICS (3) Milikan oil drop experiment, e/m measurement, photoelectric effect, electron diffraction, Franck-Hertz experiment, radioactivity, lasers, soft x-ray and additional specialized developments of current interests. Prerequisite: PHYS 66.311 or concurrently.
- 66.387 ELECTRICITY AND OPTICS (3) Kirchhoff's laws; potential differences; galvanometer measurements; resistance thermometers, fuel cells; thermoelectricity; indices of refraction—of lenses; interference effects; spectroscopy. PHYS 66.305 is a requirement which may be taken concurrently.
- 66.395 COURSE RESEARCH IN 300-LEVEL COURSES
- 66.401, 402 PHYSICS SEMINAR (1, 1) Students participate in colloquia on topics of current interests in physics research under guidance of instructor. One lecture hour. Prerequisite: Senior standing or consent of instructor.
- 66.411 PHYSICAL OPTICS (3) Electromagnetic theory of light, wave solutions, interference, diffraction, scattering, radiation from coherent and incoherent sources, elementary theory of masers and lasers. Three lecture hours. Prerequisite: PHYS 66.305 or consent of instructor.
- 66.435 ELECTRONICS (3) Principles of transistors with emphasis on their design and construction and an introduction to logic circuits. Two lecture hours and one two-hour laboratory period. Prerequisite: PHYS 66.305, 66.335.
- 66.471 INTRODUCTORY QUANTUM MECHANICS (3) The Schroedinger equation, states of one particle in one dimension, potential barrier problems in one dimension, the har-

monic oscillator, system of particles in one dimension, motion in three dimensions, angular momentum, spin, application to atomic physics. Prerequisite: PHYS 66.301. MATH 50.373.

66.472 INTRODUCTION TO STATISTICAL MECHANICS (3) Distribution function, micro-canonical, canonical and grand canonical ensembles, the partition function and thermodynamic relations. Fermi-Dirac and Bose-Einstein statistics, some simple model and

applications, the Maxwell-Boltzmann transport equation and the hydrodynamic equations, transport coefficients. Three lecture hours. Prerequisite: PHYS 66.471.

66.496 INDEPENDENT STUDY IN PHYSICS (1-4) Prerequisite: At least junior status and one course in the Physics Department.

66.497 DIRECTED READINGS (1-4) Prerequisite: At least junior status and one course in the Physics Department.

PHYSICAL SCIENCE COURSES (PHSC)

64.101 PHYSICAL SCIENCE I (4) Principles of physics with an emphasis on the application of scientific method.

64.121 GENERAL GEOLOGY (3) Composition and structure of the earth. The internal and external forces acting upon it and the surface features resulting. Laboratory studies of the common rocks and minerals, geologic and topographic maps and aerial photographs. Field studies in the Baltimore area. Two lecture hours and one two-hour laboratory period.

64.131 LIGHT AND COLOR (3) Some aspects of light and color and of vision will be examined on a factual and descriptive basis. Predominantly qualitative explorations will be made of the origin of light, of its wave and particle behavior, of the polarization of light, of lasers and holography, of the origin and physical basis of color, and of the physics of vision. This course in liberal arts physics is offered for curious inquirers who have had minimal contact with physics. Three lecture hours.

64.195 COURSE RESEARCH IN 100-LEVEL COURSES

64.201 CLASSICAL AND CONTEMPORARY WRITINGS IN THE PHYSICAL SCIENCES (1) Discussion of writings of eminent scientists and scholars—ancient and modern—in the physical sciences as they pertain to broad philosophical questions. Prerequisite: A course in Physical Science.

64.202 PHYSICAL SCIENCE II (4) A course for non-science majors who are interested in more rigorous and quantitative work in the physical sciences. Enough non-rigorous calculus will be taught with the help of a programmed text so applications in classical thermodynamics will be possible. Other topics: rigorous development of the temperature concept; heat transfer and engines. Three lecture hours and one three-hour laboratory period. Prerequisite: PHSC 64.101

and consent of instructor. Only high school algebra assumed. Not offered in 73-74.

64.203 PHYSICAL SCIENCE III (3) Principles of hydrostatics, mechanics, electricity and electronics through a study of selected practices in the transmission of energy and intelligence. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101. Not offered 73-74.

64.204 PHYSICAL SCIENCE IV (3) Principles of fluid dynamics, aeronautics, astronautics, optics and astronomy. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101. Not offered 73-74.

64.211 GENERAL ASTRONOMY I (3) Science of astronomy; investigations and theories concerning the solar system, galaxies and the universe. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101, or consent of instructor.

64.212 GENERAL ASTRONOMY II (3) A study of stars, stellar systems, galaxies, and cosmology. Emphasis will be placed on the determination of the distance scale and modern trends in astronomy including methods used on space probes. Three contact hours. Prerequisite: PHSC 64.211, or acceptable substitute.

64.222 GEOMORPHOLOGY (3) Origin and evolution of surface features of the earth as controlled by the interaction of geologic structures and erosional processes. Field work in the Maryland area. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101, 64.121.

64.234 STILL PHOTOGRAPHY (3) Emphasis will be on the production of photographs, rather than the mastery of many techniques. Camera operation, developing, printing and other topics according to student interest. Five contact hours.

64.295 COURSE RESEARCH IN 200-LEVEL COURSES

Upper Division — Undergraduate and Graduate

64.303 EARTH-SPACE SCIENCE IN CHILDHOOD EDUCATION (3) Physical science principles applied in the study of earth and

space. Emphasis on experimental and discovery approaches that may be used in the elementary school.

64.322 GEOMORPHOLOGY OF THE EASTERN UNITED STATES (3) Extent, nature, and geological history of the geomorphic provinces of the Eastern United States. Emphasis on the middle Atlantic states. Field excursions in the Maryland area. Prerequisites: 64.121 Geology.

64.401 ADVANCED LABORATORY IN PHYSICAL SCIENCE (2) Exacting Laboratory work of an advanced nature under the guidance of the Physics Department staff. Each student will present and defend his work at a seminar. Prerequisite: Consent of instructor.

64.405 FUNDAMENTAL CONCEPTS IN THE EARTH SCIENCES (3) Principles of astronomy, geology and related earth sciences. Methods of investigation employed by earth scientists. Observations in the planetarium and field studies in the Baltimore area. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101 or equivalent. No credit allowed if student has taken PHSC 64.211 (Astronomy) and/or PHSC 64.121 (Geology). Designed especially for the elementary school teacher.

64.495 COURSE RESEARCH IN 400-LEVEL COURSES

SCIENCE EDUCATION COURSES (SCIE)

The following courses are taught by instructors in the Department of Physics and Biological Sciences. Course descriptions will be found under the Education Department listings:

EDUC 26.323 EARLY CHILDHOOD EDUCATION PROFESSIONAL BLOCK 1—SCIENCE

SCIE 76.371 TEACHING SCIENCE IN EARLY CHILDHOOD

SCIE 76.375 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL

SCIE 76.379 TEACHING SCIENCE IN THE SECONDARY SCHOOL

SCIE 76.488 (SUMMERS) AEROSPACE EDUCATION WORKSHOP

SCIE 76.585 SEMINAR IN ELEMENTARY SCHOOL SCIENCE

Elementary School Science Concentration

For prospective elementary school teachers who wish a somewhat broader background in science than that obtained from the required courses. Also open to other students, but arts and science and secondary education students should be aware that this program does not provide them with the "major" they must have in order to earn a degree. Course requirements are: BIOLOGY 14.101, 105, 109, 301; PHYSICAL SCIENCES 64.101, 121, 202, 203, 204, 211 for a total of 36 hours. Students electing this concentration are urged to take MATHEMATICS 50.115.

Psychology

Professors: CASSATT, FURUKAWA (*Chairman*), HILL, NEULANDER, SAXTON, SUYDAM

Associate Professors: GROENHEIM, RASKIN, SLATER

Assistant Professors: ALLEN, BAILEY, DAVIS, DICESARE, DYER, FIGLER, LAVIN,
LEYHE, MILLER, PETRI, RABIN, RAVAL, SANDERS, SIEGEL, URBAN,
WALEN, WEBSTER, YOUNG, ZWEBACK

Assistant Instructor: CRANE

Instructor: FINK

Visiting Professors: GIBSON, POPE

Visiting Assistant Professor: McGEE

A student may elect either a major (32 hours) or minor (24 hours) in psychology programs aimed at understanding and predicting behavior. Electives beyond the basic requirements facilitate preparation for: (1) graduate work in psychology and in guidance, (2) training in special and in general education, (3) vocations requiring a liberal arts background, and (4) providing clinical services.

Psychology Major

The minimum requirements for a major in psychology are 70.101, 70.111, 70.261, and 70.305, along with an approved program of 18 elective hours in psychology. Majors in the clinical concentration, however, will be required to take other specific courses, as indicated below.

Clinical Concentration for Psychology Majors

The combined Sheppard Pratt-Towson State Clinical Concentration in Psychology will lead to a B.S. in Psychology from Towson State College and a certificate as a Mental Health Specialist from the Sheppard Pratt Hospital School of Allied Mental Health Sciences. The curriculum requirements consist of three components:

A. Basic college and psychology department requirements, as follows:

First year, first semester (17 credits: credits—17, practicum—0): 30.102 Freshman Composition, 84.101 Fundamentals of Public Speaking (Option from Art, Drama, English, Music, Philosophy, and Religion, Speech), 70.101 General Psychology (two options from Economics, Geography, History, and Political Science).

First year, second semester (15 credits: credits—15, practicum—0): two options from Art, Drama, English, Music, Philosophy and Religion, Speech; 14.101 Fundamentals of Biology (Lab) (Option from Economics, Geography, History, Political Science); and 009-059 Physical Education for Non-Majors.

Second year, first semester (16 credits: credits—16, practicum—0): 70.111 Behavioral Statistics; 70.361 Abnormal Psychology; 80.101 Introduction to Sociology; 1 option from Health and Physical Education; 1 option from *Clinical Program selections (listed below).

Second year, second semester (16 credits: credits—16, practicum—0): 70.261 Experimental Psychology; 70.350 Personality; 70.437 Clinical Interviewing I, 70.413 Clinical Testing I; *1 option from Clinical Program selections.

Third year, first semester (15 credits: credits—13, practicum—2): 70.305 Learning, 70.414 Clinical Testing II, 70.439 Clinical Interviewing II, 70.453 Introduction to Psychotherapy I, 80.347 Community Organization or equivalent.

Third year, second semester (16 credits: credits—12, practicum—4): 70.311 Behavior Modification I, 70.455 Introduction to Psychotherapy II, 70.431 Group Dynamics. One option from Group I; *One option from Clinical Program selections.

Fourth year, first semester (16 credits: credits—10, practicum—6): 70.312 Behavior Modification II; 70.435 Field Experience in Group Dynamics, 70.457 Adjunctive Services to Families of Patients, 1 option from Math or Physical Science, *One option from Clinical Program selections.

Fourth year, second semester (13 credits: credits—11, practicum—2): 70.435 Field Experience in Counseling and Work concerning Community Resources, 70.451 Introduction to Activity Therapy, *Two options from Clinical Program selections.

Clinical Program Options are: PSYCHOLOGY DEPARTMENT—70.211 Child Psychology, 70.321 Adolescent Psychology, 70.425 Introduction to the Helping Relationship, 70.309 Behavioral Pharmacology, 70.471 Introduction to the Exceptional Child, 70.370 Foundations of Rehabilitation Counseling, (new) Psychology of Aging. SOCIOLOGY DEPARTMENT—80.203 The Family, 80.381 Minority Groups, 80.383 Criminology, 80.386 Juvenile Delinquency. MORGAN STATE COLLEGE—19.410 Addiction & Alcoholism I, 19.411 Addiction and Alcoholism II, 19.301 Community Mental Health, 19.302 Community Mental Health, 19.403 Community Action for Mental Health I (Seniors).

B. Work-Study Blocks.

There are nine work-study blocks, each consisting of courses and closely related practicum experiences. Eight work study blocks lead to the development of skills in clinical areas, and the ninth, in research. The study blocks are: (1) Dyadic helping relationship (Individual therapy); (2) Group interaction (Group therapy; Psychodrama); (3) Interviewing; (4) Counseling and work with community resources; (5) Therapeutic services for family (relatives) of patient; (6) Psychological testing; (7) Activity Therapy; (8) Behavior Modification; and (9) Research.

C. Field Training in Human Services, 70.443 (4 credits—2 per summer)

In contrast to the practicums, which are supervised clinical experiences closely related to courses in the curriculum, the field experiences are brief, exposures to on-the-job training. There will be five such field experiences, the first a three week period during the minimester of the Sophomore year, and the remaining four coinciding with the two summer sessions after the Sophomore and Junior years. Each of the five field assignments is a supervised work experience, with stipend. Two of the field assignments will be required; these will be on in-patient halls at Sheppard Pratt Hospital. The remaining three will be elective, to be chosen from a list of twelve available clinical facilities. Supervision for the field experiences will generally be provided by the placement facilities.

D. Minimum Requirements.

All Psychology courses required for the clinical concentration must be completed with a minimum grade of C.

Psychology Minor

The minimum requirements for a minor in psychology are 70.101, 70.111, 70.261, and 70.305, along with an approved program of 10 elective hours in psychology.

Psychology Honors

Admission is granted at the end of the sophomore year or beginning of the junior year to students who have the following qualifications: Grade point average of at least 3.00 overall and 3.25 in major field, recommendations from Departmental Chairman and advisor, and approval by the College Honors Program Board. The minimum requirements for graduation with honors in psychology are grade point averages of 3.00 overall and 3.50 in major field and completion of 70.385, 70.485 and 70.499.

PSYCHOLOGY COURSES (PSYC)

Lower Division — Undergraduate

- 70.101 (101) GENERAL PSYCHOLOGY (3) Methods and principles. Attention to: Measurement, experimentation, sensation, perception, learning, emotion, thinking, remembering, personality, adjustment, development and individual differences. Students will be required to participate in two supervised experiments (outside of class time) to further their understanding of the application of methods of science to the study of human behavior. Prerequisite: None. Fall, Spring, Summer.
- 70.106 (104) APPLIED PSYCHOLOGY (3) Psychologists' contributions to education, medicine, law, mental health and business. Application to problems in these areas. Lectures and field trips. Prerequisite: None. Spring.
- 70.111 (110) BEHAVIORAL STATISTICS (4) Distributions and graphs, notation, levels of measurement, percentiles, measures of central tendency and variability, principles of probability, the normal curve, standard scores, sampling theory, hypothesis testing, significance of differences, correlation and prediction, computation on computer terminals, Chi square, Non-parametrics, One-Way analysis of variance. Prerequisite: None. Fall, Spring, Summer.
- 70.201 (203) EDUCATIONAL PSYCHOLOGY (3) The learning process and related concepts; human development; individual differences; measurement and evaluation; personality and adjustment. Prerequisite: 70.101. Fall, Spring, Summer.
- 70.203 HUMAN GROWTH AND DEVELOPMENT (3) A study of research and theories related to the overall development of the child and the adolescence with emphasis on the relative influences of the home, the peer group, the school and the social milieu on the developing self. Prerequisite: 70.101. Spring & Fall.
- 70.209 CONSUMER BEHAVIOR (3) Basic psychological concepts concerning consumer behavior such as the cognition, perception, learning, attitudes, cognitive dissonance, risk-taking, motivation, and personality of the buyer. Emphasis on the interrelation of economic and sociocultural factors on consumer decision-making, including recent research findings and marketing applications. Prerequisite: 70.101 Spring & Fall.
- 70.211 (205) CHILD PSYCHOLOGY (3) Theories and research methods of child behavior. Development of major psychological functions. Prerequisite: 70.101. Fall, Spring, Summer.
- 70.221 (322) SOCIAL PSYCHOLOGY (3) The structure and function of groups. Recent advances in sociology, anthropology and psychiatry as related to psychology. Prerequisite: 70.101. Fall & Spring.
- 70.223 INDUSTRIAL PSYCHOLOGY (3) A survey of psychological principles applied to man at work, to work tasks, to work settings, and to the design of equipment used in work. Prerequisite: 70.101. Fall.
- 70.230 (420) MENTAL HYGIENE (3) Adjustment as related to mental health, problems to which adjustment is made, and the nature of conflict. Prerequisite: 70.101. Spring.
- 70.261 (210) EXPERIMENTAL PSYCHOLOGY I (4) The experimental method and its application to recent problems in psychological research; introduction to experimental design and inference; animal and human learning, perception, social, personality, maturation. Three hours lecture, two hours laboratory per week. Prerequisites: 70.101 and 70.111. Fall, Spring.
- 70.262 (211) EXPERIMENTAL PSYCHOLOGY II (4) The experimental analysis of behavior. Introduction to independent research and to computer technology. Three hours lecture, two hours laboratory per week. Prerequisite: 70.261. Spring.

Upper Division — Undergraduate and Graduate

- 70.305 (308) PSYCHOLOGY OF LEARNING (3) Analysis of selected problems in both human and animal learning including reinforcement, punishment, verbal learning and verbal behavior. Prerequisite: 70.261. Fall.
- 70.309 BEHAVIORAL PHARMACOLOGY (3) A systematic investigation of the effects of drugs on behavior. Drug classification, historical aspects, methodological considerations, uses in treatment, drug abuse, and related topics will be considered. Prerequisite: 70.261 or consent of instructor. Fall, Spring, alternate summers.
- 70.311 BEHAVIOR MODIFICATION I (3) Examination & application of the basic principles of the experimental analysis of behavior, with an emphasis on the applied aspects of this modern discipline to schools, jobs, interpersonal relations and self control. Prerequisites: 12 hours of Psychology, including 70.261. Spring.
- 70.312 BEHAVIOR MODIFICATION II (3) Intensive academic and practicum training in various individually oriented behavior therapy techniques. Close individual supervision in practicum work. Prerequisite: 70.311. Fall.
- 70.315 (303) MOTIVATION (3) Theories of motivation, motivational antecedents, and the consequences of such antecedents on instrumental behavior, learning and perception. Prerequisite: 6 hours. Fall.

- 70.317 SENSATION AND PERCEPTION (3)** A systematic investigation on the basic senses such as vision, audition, taste, smell, and touch will be undertaken. The organization of sensory input will also be emphasized. Both human and non-human data will be presented. Prerequisite: 70.261. Spring.
- 70.321 (407) ADOLESCENT PSYCHOLOGY (3)** Physical, emotional, intellectual development during adolescence; social development and heterosexuality; adolescent personality; problems of adjustment; juvenile delinquency. Prerequisite: 70.211 or 70.201. Fall, Spring.
- 70.330 (304) PSYCHOLOGY OF INDIVIDUAL DIFFERENCES (3)** Individual differences in human traits and characteristics; methodology, basic principles, and major findings in research. Prerequisites: 70.101 and 70.111. Spring.
- 70.350 (305) PERSONALITY (3)** Theoretical and practical approaches to the study of personality. Introduction to psychodynamics and to methods and materials of assessment. Prerequisite 6 hours. Spring.
- 70.361 (306) ABNORMAL PSYCHOLOGY (3)** Disordered personal reactions to life. Organic and functional phenomena plus therapeutic techniques. Prerequisite: 9 hours. Fall.
- 70.370 (331) FOUNDATIONS OF REHABILITATION COUNSELING (3)** The development of rehabilitation programs; their legal basis and historical background. The role of medical, psychological, educational and community resources in the rehabilitation program are explored. Client eligibility, determination, and counselor responsibilities will be reviewed. Prerequisite: 70.101. Spring.
- 70.381 (391) READINGS IN PSYCHOLOGY (1-2) (Honors)** A survey of relevant research literature under the guidance of a staff member who will direct the students' research. Prerequisite: 70.261, Honors approval or consent of instructor. Fall, Spring.
- 70.383 PROCTORING IN PSYCHOLOGY (3)** Students serve as teaching apprentices or proctors in a course which they have already completed (such as General Psychology), and which they must relearn to 100% mastery. Students will manage the learning and evaluate individual progress of the members of the class assigned to them. The experience includes guidance, support, and motivation of the assigned students, all in a supervised situation. Prerequisite: Successful completion of 5 or more Psychology courses and permission of the instructor. Fall, Spring, Summer.
- 70.385 (385) SEMINAR IN PSYCHOLOGY (1-3) (Honors)** Survey and critical evaluation of modern literature pertaining to selected problems in Psychology. Prerequisite: 70.261, Honors approval, or consent of instructor. Fall, Spring.
- 70.411 (410) TESTS AND MEASUREMENTS (3)** Psychological and educational testing and evaluation. The construction, administration, interpretation and use of various evaluative devices of aptitude and achievement. Prerequisites: 70.101 and 70.111. Fall, Spring, Summer.
- 70.413 CLINICAL TESTING PROCEDURES I (3)** Introduction to testing in a clinical setting. The nature of tests. The nature of personality assessment. Referral problems. Psychometric approach to specific tests of intelligence and organicity. Role of examiner. Ethical standards. Prerequisite: 70.111 and 70.361. Spring.
- 70.414 CLINICAL TESTING PROCEDURES II (3)** Psychometric use of projective techniques. Test observation. Reporting test data. Ethical use of psychometrical techniques. Prerequisite: 70.413. Fall.
- 70.416 (411) PERSONALITY MEASUREMENT (3)** A continuation of 70.411 that will emphasize the use and interpretation of instruments for measuring attitudes, interests and related aspects of personality. Instruments studied will include paper-pencil inventories, projective devices and observational procedures. Prerequisite: 70.411 and 70.230, or 70.361. Spring.
- 70.425 (423) INTRODUCTION TO THE HELPING RELATIONSHIP (3)** Current concepts of the helping relationship and an exploration of the conditions that facilitate its effectiveness. Prerequisite: 70.101, and psychology major or minor planning to enter one of the helping professions, or graduate student in Guidance and Counseling, or consent of the department. Fall, Spring, Summer.
- 70.427 INTRODUCTION TO INTERVIEWING TECHNIQUES I (3)** The theory and methods of delivery of helping services via the interview. Prerequisites: minimum of 2 months interviewing experience and permission of instructor. Course is offered in 1 week session. Jan. and June.
- 70.430 (426) SYSTEMS AND TECHNIQUES OF COUNSELING PRACTICE (3)** Review and application of current theoretical approaches to the helping relationship. Prerequisites: 70.425 and either 70.230 or 70.361 or 70.540. Spring.
- 70.431 GROUP DYNAMICS (3)** Intensive study of group interactions with emphasis upon reciprocal group influence of behavior. Prerequisite: 70.221 or consent of instructor. Fall.
- 70.435 (427) SUPERVISED FIELD EXPERIENCE (3-6)** Placement in a community service agency to familiarize the student with its current practices. Supervised client contact will be provided. Prerequisites: 70.370, 70.430 and departmental consent.
- 70.437 CLINICAL INTERVIEWING I (3)** Combined didactic and experiential coverage of types of interviews, dimensions of inter-

viewer input, interviewee response and of relationships. Prerequisite: 70.425 plus admission in Clinical Concentration in Psychology. Fall.

70.439 CLINICAL INTERVIEWING II (3) Clinical observation and practicum experience. Focus on interviewer and interviewee dimensions and relationship with patients. Use of tapes, seminars and individual supervision. Prerequisite: 70.437. Fall.

70.441 INFORMATION SERVICE IN COUNSELING AND GUIDANCE (3) Educational and vocational resources. Evaluation, classification and use of such information. Prerequisite: 70.101.

70.443 FIELD TRAINING IN HUMAN SERVICES (1) Work experience in a hospital or clinic setting in the field of human services. Prerequisite: Acceptance in Clinical Concentration. Summer.

70.451 INTRODUCTION TO ACTIVITY THERAPY (4) Principles and procedures of activity as a method of therapy (e.g., occupational, recreational, vocational, music, dance, art, drama). Practicum includes observation of various methods and participation under supervision in occupational and recreational therapy. Prerequisite: 70.350, 70.361, 70.431. Spring.

70.453 INTRODUCTION TO PSYCHOTHERAPY I (3) Readings, lectures, and seminars relating to psychological emergencies and the modes of intervention during psychological crises. Prerequisite: 70.425. Fall.

70.455 INTRODUCTION TO PSYCHOTHERAPY II (4) Survey of methods and techniques to dyadic therapy using selected readings. Practicum involving observation and seminar discussions and participation with individual supervision. Prerequisite: 70.425 and 70.453. Spring.

70.457 ADJUNCTIVE SERVICES TO FAMILIES OF PATIENTS (4) Organization and adaptation of treatment procedures to the family as a group, and to individual relatives. Practicum at a neighboring state hospital, under supervision. Prerequisite: 70.211, 70.321, 70.361, 70.453, 80.203. Fall.

70.460 (409) COMPARATIVE PSYCHOLOGY (4) The differences in behavior between species will be compared within a framework of learning, ethology, and neuropsychology.

Graduate Division

70.511 (501) DEVELOPMENTAL PSYCHOLOGY (3) Psychological structures and functions in human development. Theoretical and research approaches. Prerequisite: 70.201 or equivalent. Fall, Spring, Summer.

70.520 INDIVIDUAL INTELLIGENCE TESTING (3) Construction, standardization, administration, scoring and interpretation of the Wechsler Individual Intelligence Tests, the Stanford-Binet Intelligence Scale, Human Figure Drawings, the Bender Gestalt, the

Three hours of lecture, two hours laboratory per week. Prerequisite: 70.261. Spring.

70.461 COGNITIVE PSYCHOLOGY (3) This course will deal with the nature of the cognitive processes, an analysis of the organization of cognitive abilities, and problems in cognition. Theoretical viewpoints will be explored, including those of Piaget, J. P. Guilford, Ausubel, Lewin, Skinner. A comparison among theories will be made as they relate to the thinking processes. Prerequisites: 70.203, 70.205 or with permission of instructor. Spring.

70.465 (412) PHYSIOLOGICAL PSYCHOLOGY (4) The physiological basis of behavior, with consideration of receptor, central and effector structures and function. Three hours lecture, 2 hours laboratory per week. Prerequisite: 70.261 or permission of instructor. Fall.

70.471 (460) INTRODUCTION TO THE EXCEPTIONAL CHILD (3) Children with a typical, physical, mental, social and emotional development, including the physically handicapped, the mentally retarded, the gifted, and emotionally disturbed children. Prerequisite: 70.201 or 70.211. Fall.

70.480 (488) SYSTEMS OF PSYCHOLOGY (3) Schools of psychology with their theoretical and methodological approaches. Prerequisite: At least a junior psychology major and consent. Spring.

70.485 (486) EXPERIMENTAL DESIGN (4) (Honors) Design and analysis—Analysis of variance (completely randomized design, repeated measurement designs, etc.), multiple comparisons, nonparametrics, general problems related to sampling, experimental effects, etc. Prerequisite: 70.111. Honors approval or consent of instructor. Fall, Spring.

70.491 (490) INDEPENDENT INVESTIGATION IN PSYCHOLOGY (3) An opportunity for especially qualified students to undertake research problems according to their interest and training under the direction of a staff member. Prerequisite: 70.261 and consent of department. Fall, Spring.

70.499 (499) SENIOR THESIS IN PSYCHOLOGY (4) (Honors) Independent research on special problems in Psychology or closely related fields. Prerequisite: 70.261, 70.485, Honors approval. Fall, Spring.

Gray Oral Reading Test and the Wide Range Achievement Test. Prerequisite: 70.111 and 70.411. Open only to M.A. candidates in School Psychology Program. Consent of coordinator. Fall.

70.521 (505) ADVANCED EDUCATIONAL PSYCHOLOGY (3) Survey of current research in Child Psychology, Learning, Mental Hygiene, and Tests and Measurements. Emphasis on critical analysis of studies. Prerequisite: 70.511. Fall, Spring, Summer.

- 70.531 (506) **ADVANCED ABNORMAL PSYCHOLOGY (3)** Current and historical perspectives of psychopathology. Emphasis on varied approaches in contemporary schools. Methods of assessment and treatment. Prerequisite: 70.230 or 70.361. Spring.
- 70.540 (553) **MENTAL HYGIENE IN EDUCATION (3)** Principles of mental hygiene and their application to the educational setting. Major emphasis on wholesome personality development. Prerequisite: 70.511. Spring.
- 70.543 **INTRODUCTION TO SCHOOL PSYCHOLOGY (1)** An introduction to ethics and issues in school psychology and preparation of the student to move efficiently through the program. This course should be taken at the beginning of the student's course of studies. Prerequisite: Graduate student in School Psychology Program. Consent of coordinator. Fall, Spring.
- 70.550 (577) **DIAGNOSTIC TECHNIQUES IN EDUCATION (3)** Use of standardized and teacher-constructed instruments for diagnostic and instructional purposes. Prerequisites: 70.511, 70.411 or equiv. Spring.
- 70.551 **TECHNIQUES OF GROUP INTERVENTION IN THE SCHOOLS (3)** A theoretical and experiential introduction to the techniques available for use with children experiencing difficulty in the school environment. Emphasis will be on learning the techniques through action participation. Prerequisite: M.A. candidate in School Psychology or Guidance and Counseling Programs. Consent of coordinator. Spring, Summer.
- 70.553 **ISSUES AND RESEARCH IN SCHOOL PSYCHOLOGY (3)** Provides for analysis of major issues in school psychology through the study of selected research. Prerequisite: 70.111, open only to graduate students in the School Psychology Program.
- 70.563 **SYSTEMS OF PSYCHOTHERAPY (3)** Course is designed to acquaint students with the more prominent schools of psychotherapy. Particular emphasis is placed on the psychotherapeutic aspect of educational and clinical settings. Prerequisites: 70.350, 70.361 or 70.230, 70.531. Spring.
- 70.570 (519) **REFERRAL RESOURCES FOR THE SCHOOL AGE CHILD (3)** A study of referral services for the enhancement of the emotional, vocational, and the behavioral adaptation of children in need of services beyond the classroom situation. The course attempts to give direct knowledge to the student of all such specialized facilities both school and community sponsored. Prerequisite: 70.511. Summer.
- 70.573-70.574 **ADVANCED EXPERIMENTAL PSYCHOLOGY (4, 4)** The first semester is comprised of experimentation in the field of human behavior, and the second will emphasize experimentation in the field of animal behavior. Prerequisite: Consent of department. Spring.
- 70.577 **LEARNING (3)** A thorough coverage of major learning theories and models. Prerequisite: Consent of department. Fall.
- 70.579-580 **SEMINAR (1, 1)** Selected readings of the current literature will be investigated by the students and faculty. Prerequisite: Consent of department. 579 (Fall), 580 (Spring).
- 70.581 **ADVANCED HISTORY AND SYSTEMS OF PSYCHOLOGY (3)** Ancient and modern psychological history; discussion of ancient history will draw heavily from both philosophy and physiology; discussion of modern history will develop psychology in various countries. The analysis of systems will include a study of functionalism, structuralism, behaviorism gestalt and psychoanalysis. Prerequisite: Consent of department. Summer.
- 70.584 **COLLEGE TEACHING SEMINAR (3)** Materials and procedures for producing successful students in lower level courses will be explored. Prerequisite: Consent of department. Spring.
- 70.587-588 **EXPERIMENTAL DESIGN (3, 3)** In the first semester, emphasis will be placed on the techniques of analysis of variance and non-parametric statistics. The second semester is comprised of a detailed survey of correlational and factor analytic techniques. Prerequisite: Consent of department. 587 (Fall), 588 (Spring).
- 70.591 (515) **PROJECTIVE TECHNIQUES I (3)** This is the first of a two-course sequence dealing with projective techniques. Credit will be awarded only upon completion of the first and second semester of the sequence. The first semester emphasizes an introduction to the administration, scoring and interpretation of projectives in current clinical use. Prerequisite: Open only to M.A. candidates in School Psychology Program. Consent of coordinator. Fall.
- 70.592 (516) **PROJECTIVE TECHNIQUES II (3)** The second of a two-semester sequence in projective techniques. This semester emphasizes the interpretation and appropriate transmission of projective data. Particular emphasis will be placed on the evaluation of learning problems. Prerequisite: 70.591, open only to M.A. candidates in School Psychology Program. Consent of coordinator. Spring.
- 70.605 (511) **PRINCIPLES OF GUIDANCE (3)** Aims at establishing a philosophy and gaining a knowledge of the principles of guidance. Includes an introduction to the literature of the field. Prerequisite: 70.511 or equivalent. Fall, Spring, Summer.
- 70.607 (520) **OCCUPATIONAL INFORMATION (3)** Provides students with knowledge of educational and vocational opportunities and community referral sources essential to a sound guidance program. Includes evaluation, classification and use of such information.

tion in the instructional program. Group guidance, counseling and placement. Prerequisite: 70.605.

70.611 (512) ANALYSIS OF THE INDIVIDUAL (3) Techniques available in studying the individual. Emphasizes data in the areas of vocational, educational and personal adjustment. Prerequisites: 70.605 and 70.411. Fall, Spring, Summer. (70.605 may be taken concurrently.)

70.615 (510) TECHNIQUES OF COUNSELING (3) Counseling and therapy techniques used by counselors and other professional personnel working with children and adults. Prerequisites: 70.430 or equivalent Spring, Fall, Summer.

70.617 THE HOLTZMAN INKBLOT TECHNIQUE I (3) Introduction to the Holtzman Inkblot Technique, administration and scoring of the test record. Prerequisites: 70.591.

70.618 THE HOLTZMAN INKBLOT TECHNIQUE II (3) Interpretation of scored records (a) based on the 22 scoring variable and (b) based on Personality variables. Prerequisites: 70.617.

70.621 (514) GROUP TECHNIQUES IN GUIDANCE AND COUNSELING (3) The selection, organization and effective use of group guidance materials and techniques in providing for the common needs of groups of students in making more effective educational, occupational, social and personal adjustment. Prerequisites: 70.430 and 70.441. Fall.

70.625 COUNSELING OF MINORITY GROUPS (3) A study of the counseling function with emphasis upon minority group needs, counselor attitudes, and techniques. Special focus on counseling in the urban school setting and techniques to be used with minority students. Prerequisite: 70.430.

70.627 (527) USE OF TESTS IN COUNSELING (3) Practice in the use and analysis of techniques for understanding the individual with emphasis upon standardized procedures used in the public schools. Prerequisites: 70.611. Fall.

70.630 (517) COUNSELING THE ELEMENTARY SCHOOL CHILD (3) Study of the dynamics of child behavior, techniques of assessing and counseling. Study of the family, school, and community structures and their effect on the child. Prerequisites: 70.430. Spring.

70.635 (530) COMMUNICATION MEDIA WITH CHILDREN I (3) Introduction to the methods and materials used in diagnostic and therapeutic approaches to children. Use of toys, art media and play activities emphasized. Prerequisites: 70.615 or equivalent. Fall.

70.636 (531) COMMUNICATION MEDIA WITH CHILDREN II (3) A continuation of Psyc 530 with emphasis upon practical application of the theoretical principles involved in the psychodiagnostic and therapeutic use of play media. Use of the play-room and its materials will be emphasized. Prerequisites: 70.645 and 70.635. Spring.

70.645 (523) COUNSELING PRACTICUM I (3) Supervised experience in educational, vocational and personal counseling. Prerequisites: 615 plus consent of the department. Fall, Spring, Summer. Credit will be granted for this course upon completion of Psychology 646 or Psychology 635-636.

70.646 (525) COUNSELING PRACTICUM II (3) Field experience in educational, vocational and personal counseling. Prerequisites: 70-645 plus consent of the department. Fall, Spring. Students registering for this course will be required to have one half day (1 p.m. to 5 p.m.) free for Practicum assignments.

70.651 (521) CLINICAL PRACTICUM IN SCHOOL PSYCHOLOGY I (3) Provides an opportunity to participate in diagnostic, remedial and therapeutic planning as well as follow-up studies under supervision of certified psychologists. Prerequisites: M.A. candidate in School Psychology Program. 70.520, 70.591, 70.592. Consent of Coordinator. Fall.

70.652 (522) INTERNSHIP IN SCHOOL PSYCHOLOGY (3) Each student must be a full-time student during the semester he enrolls in this course, typically the last semester of work. The student will be placed on Internship in a school or clinic depending upon his specific orientation. He will participate in the complete workings of that agency under the direct supervision of a practicing certified psychologist. Prerequisite: 70.651, consent of coordinator. Spring.

70.656 (595) SEMINAR IN COUNSELING—ELEMENTARY (3) Analysis of research trends; examination of critical issues, reports of student research projects, professional problems and ethics. Prerequisites: 70.645. Summer.

70.660 (596) SEMINAR IN COUNSELING—SECONDARY (3) Analysis of research trends, examination of critical issues, reports of student research projects, professional problems and ethics. Prerequisites: 70.645. Summer.

70.690 (591) SEMINAR IN SCHOOL PSYCHOLOGY (3) Consideration of current practices, trends and evaluative techniques in School Psychology. Prerequisite: Consent of coordinator. Fall.

70.699 THESIS (3) Optional for students in Master of Arts for School Psychologists program. Required for students in Master's of Arts in General Psychology.

Social Sciences

Coordinator: JOSEPH A. FALCO

This is an interdepartmental major made up of the Department of Economics and Political Science, the Department of Geography, the Department of History, and the Department of Sociology and Anthropology. The program is administered by a Committee composed of a representative from each discipline of the social sciences. The members of the Committee are: Joseph A. Falco, Professor of History, Chairman of the Committee and Coordinator of the Social Science Program; George C. Coleman, Professor of Political Science; David Firman, Professor of Geography; Irwin Goldberg, Professor and Chairman, Department of Sociology and Anthropology; Fred M. Rivers, Associate Professor of History; Henry N. Sanborn, Professor Economics.

The Program is designed for those students who do not wish to be confined to a major in a single social science discipline, but are interested in a broad education, transcending traditional department boundaries. It is useful for those students who plan to enter graduate school for an advanced degree in one of the social sciences; for those students who plan to enter professional schools for a degree in law, social service, or a phase of law enforcement; for those students who seek a broad background in preparation for employment in business and industry, or with a governmental agency. It is particularly designed for students planning to teach social studies at the secondary school level.

The major offers the student the choice of two distinct social science programs: a social science major in liberal arts or a social science major in secondary school teaching.

The requirements for the Social Science Major in Liberal Arts are 66 credit hours as follows: Economics: 24.101 and 102 (6 hours); Geography: 34.101 or 102, and one upper division course depending on the interests of the student (6 hours); History: 40.262, 263, 264—any two courses (6 hours) and 40.145, 146 (6 hours); Political Science: 68.101, 103, 107, 207—any two courses (6 hours); Sociology and Anthropology: 80.101 and 10.207 (6 hours); Plus: 30 hours of upper division courses selected from any of the social sciences with a minimum of 9 hours in each of three disciplines selected.

The requirements for the Social Science Major in Secondary Teaching are 54 credit hours as follows: Economics: 24.101 and 102 (6 hours); Geography: 34.101 or 102, and one upper division course depending on the interests of the student (6 hours); History: 40.262, 263, 264—any two courses (6 hours) and 40.145, 146 (6 hours) plus 6 hours of upper division history electives; Political Science: 68.101, 103, 107, 207—any two courses (6 hours); Sociology and Anthropology: 80.101 and 10.207 (6 hours); Plus: 12 hours upper division electives selected from any of the social sciences.

Transfer Students:

It is expected that all transfer students in the Social Science Program will earn at Towson State College a minimum of one-half the total number of credit hours required for the major.

Degree Programs:

A student may earn a Bachelor of Science degree in secondary education, a Bachelor of Science degree in Liberal Arts without a foreign language requirement, or a Bachelor of Arts degree with a foreign language. The language requirement is met by completing the intermediate course or equivalent of a modern foreign language.

Sociology and Anthropology

Professors: HOJJATI, KRANZLER, TOLAND, GOLDBERG (*Chairman*)

Associate Professors: KANDEL, LEONS, STANLEY

Assistant Professors: FISHER, SMITH, SEDLACK, WOLF

Instructors: COCKEY, JONES, REYNOLDS, CAFFERATA

The Purpose of the major in Sociology and Anthropology is to acquaint the student with the methods and perspectives of these disciplines, to help him understand the society in which he lives, and to prepare him for graduate study in either Sociology or Anthropology.

Requirements for the Major

Students may choose one of three concentrations offered by the Department.

Concentration in Sociology

Introduction to Sociology (80.101); Behavioral Statistics (70.111) or Basic Statistics (50.231); Sociological Theory (80.407); Research Methods (80.495); and eighteen additional hours of elective courses offered by the Department of which no more than six may be in Anthropology courses and at least twelve of which must be in courses at the 300 or 400 level. At least twelve of the required thirty credits must be taken in residence at Towson.

Concentration in Sociology and Anthropology

Requirements are identical to that stated above for the Concentration in Sociology except that students may choose their eighteen credits of electives from among any courses in the Department, Sociology or Anthropology.

Concentration in Anthropology

Cultural Anthropology (10.207); Human Evolution and Prehistory (10.208); Behavioral Statistics (70.111) or Basic Statistics (50.231); Anthropological Theory (10.401); and eighteen additional hours of elective courses of which no more than six may be in Sociology. At least twelve credits are selected from courses at the 300 or 400 level. At least twelve of the required credits must be taken in residence at Towson.

Research Methods (80.495) is strongly recommended. If taken, a total of twelve credits may be selected from among courses in Sociology.

The following courses in linguistics may be credited toward the concentration: Comparative Grammar (30.322); Historical Linguistics (30.325); and Structural Linguistics (English 30.327).

SOCIOLOGY COURSES (SOCI)

Lower Division — Undergraduate

80.101 INTRODUCTION TO SOCIOLOGY (3) Sociological concepts, theories, methods; a study of society and culture; the influence of the social environment on individual behavior.

80.203 THE FAMILY (3) The family as the basic group in human societies; its development; its relation to other social institutions; the family in modern industrial societies. Prerequisite: SOCI 80.101.

80.231 SOCIAL PROBLEMS (3) Problems in social relations created by the organization of society, exploration of alternative means of achieving social goals. Prerequisites: 80.101; junior and senior majors in Sociology.

Upper Division — Undergraduate and Graduate

- 80.303 SOCIAL WELFARE (3)** Historical development; philosophy and theory; processes developed and fields of social work; Federal, state and community programs. Prerequisite: SOCI 80.101.
- 80.342 SOCIAL STRATIFICATION (3)** The nature of social stratification; relationship of social mobility to social organization; social class structure in traditional and dynamic societies. Prerequisite: SOCI 80.101.
- 80.343 SOCIAL CHANGE (3)** A sociological analysis of the sources, processes and consequences of social change. Prerequisite: SOCI 80.101 and consent of instructor.
- 80.344 URBAN SOCIOLOGY (3)** Survey of the theoretical and sociological conceptualizations of modern Western industrial cities (80.101 plus 12 hours SOCI strongly suggested).
- 80.345 ORGANIZATIONS (3)** Structure and functioning of large scale organizations; formal and informal aspects of bureaucracies in business, government, politics, education and other institutional spheres of society. Prerequisite: SOCI 80.101.
- 80.347 COMMUNITY ORGANIZATION (3)** The organization of the community as a vehicle for identifying and meeting human needs; processes and techniques of community planning and development, traditional and contemporary. Prerequisite: SOCI 80.101.
- 80.349 POLITICAL SOCIOLOGY (3)** The contemporary relevance of the classic theorists in Political Sociology: Tocqueville, Marx, Weber, and Mosca. Prerequisite: SOCI 80.101.
- 80.357 IDEOLOGY, POWER AND SOCIETY (3)** Problems in the relationship social structure and belief systems; analysis of the concepts of mass society, elite dominance, and the political consequences of bureaucracy. Prerequisite: SOCI 80.101.
- 80.363 INDIVIDUAL AND SOCIETY (3)** A social psychological approach to the interrelationships of the individual and his social and cultural environment; behavioral characteristics resulting from social experience. Prerequisite: SOCI 80.101.
- 80.381 MINORITY GROUPS (3)** An examination of Intergroup life as an aspect of society; conflicts between races, ethnic groups, and minorities; prejudice, segregation and integration. Prerequisite: SOCI 80.101.
- 80.383 CRIMINOLOGY (3)** The nature of crime; factors underlying criminal behavior; police, courts, law, and correctional institutions. Prerequisite: 80.101.
- 80.386 JUVENILE DELINQUENCY (3)** A study of delinquency; the process of socialization and delinquent behavior in society; prevention and treatment of delinquency. Prerequisite: SOCI 80.101.
- 80.392 DEMOGRAPHY (3)** Social, economic, and political problems related to changes, distribution and movement of population; analysis of contemporary population trends in the U.S. and the world. Prerequisite: SOCI 80.101.
- 80.401 MEDICAL SOCIOLOGY (3)** A study of social and cultural perspectives on illness; demographic trends; the health professions; and institutions for the delivery of health care services. Prerequisite: SOCI 80.101.
- 80.403 COLLECTIVE BEHAVIOR (3)** Study of historical and contemporary major unstructured and semi-structured situations; crowds, mobs, riots. Prerequisite: 80.101.
- 80.406 SOCIOLOGY OF EDUCATION (3)** Sociological analysis of education as a basic social institution; formal and informal organizations of education systems; relationship to socialization; major social trends in education; concept of academic freedom. Prerequisite: SOCI 80.101.
- 80.407 SOCIOLOGICAL THEORY (3)** Major systems of sociological theory; the works, assumptions, and workings of major European and American schools. Prerequisites: Junior Standing, SOCI 80.101 and 9 additional hours SOCI.
- 80.408 ADVANCED SOCIOLOGICAL THEORY (3)** Critical analysis of emerging theoretical schools. Attention will be given to contemporary theoretical problems. Prerequisites: 80.101 and 80.407.
- 80.457 SOCIAL DEVIANCE (3)** Deviance as an aspect of social living; the problem of understanding conformity and deviance; identification of deviants; society's response to deviant behavior. Prerequisite: SOCI 80.101.
- 80.470-479 SPECIAL TOPICS IN SOCIOLOGY (3)** An examination of current topics in Sociology. The content of the course will depend upon mutual faculty and student interest. Prerequisite: SOCI 80.101 and consent of instructor.
- 80.485 SEMINAR IN SOCIOLOGY (3)** Exploring and analyzing major areas of sociology. For senior students with a major in sociology. Prerequisite: SOCI 80.407 and consent of instructor.
- 80.495 RESEARCH METHODS (4)** A consideration of methodology of sociological research; the various steps in conducting research projects, from statement of the problem to final analysis of data. Prerequisite: SOCI 80.101; 9 additional hours of SOCI; and either PSYC 70.111 or Math 50.231.
- 80.499 INDEPENDENT RESEARCH (3)** Supervised research and sociological investigation leading to preparation of a research project or a supervised laboratory experience in a social agency. For senior students with a major in sociology. Prerequisite: SOCI 80.495 and consent of department chairman.

ANTHROPOLOGY COURSES (ANTH)

Lower Division — Undergraduate

10.207 CULTURAL ANTHROPOLOGY (3) Introduction to social and cultural anthropology; cultural theory, social structure, human ecology, language and culture, technology, religion, art, and literature. Prerequisite: SOCI 80.101.

10.208 HUMAN EVOLUTION AND PREHISTORY (3) The study of man: his biological and cultural development through time. This course is equivalent to Anthropology 105 previously offered. Students who have had Anthropology 105 may not receive credit for Anthropology 208 but may take Anthropology 207.

Upper Division — Undergraduate and Graduate

10.346 POLITICAL ANTHROPOLOGY (3) Comparative political institutions and behavior among contemporary non-literate societies. Theoretical problems of social control, state and non-state systems, symbolic aspects of power, levels of political integration, and warfare.

10.381 ARCHAEOLOGICAL METHODS AND THEORY (3) Methods of excavating and recording archaeological data. Investigation of problems of current research interest. Prerequisite: ANTH 10.207.

10.364 RELIGION, MAGIC AND WITCHCRAFT (3) The world view, beliefs and rituals of selected non-literate peoples considered with reference to religion as a universal category of human culture. Prerequisite: SOCI 80.101 or ANTH 10.207.

10.383 NORTH AMERICAN ARCHAEOLOGY (3) Regional survey of the prehistory of the North American Indians with emphasis on the American Southwest and the Eastern Woodlands. Prerequisite: ANTH 10.207 and consent of instructor.

10.365 ETHNOLOGY OF NORTH AMERICA (3) A comparative description and interpretation of native American Indian culture. Prerequisite: ANTH 10.207.

10.388 PEASANT CULTURES (3) The course will focus on the rural agricultural population of modern states; their traditional life-ways and the changes being wrought by modernization. Prerequisites: SOCI 80.101 or ANTH 10.207.

10.366 ETHNOLOGY OF SOUTH AMERICA (3) Survey of the native peoples of South America with emphasis on Pre-Columbian societies. Offered in alternate years. Prerequisite: ANTH 10.207.

10.401 ANTHROPOLOGICAL THEORY (3) Survey of the theoretical contributions made by American, British and Continental anthropologists. ANTH 10.207 and 9 hrs. of ANTH.

10.367 ETHNOLOGY OF THE MIDDLE EAST (3) Survey of the Middle East as a culture area with emphasis on culture change. Prerequisite: ANTH 10.207.

10.470-479 SPECIAL TOPICS IN ANTHROPOLOGY (3) An examination of current topics in Anthropology. The content of the course will depend upon mutual faculty and student interest. Prerequisites: ANTH 10.207.

10.377 SOCIETIES AND CULTURES OF LATIN AMERICA (3) An anthropological perspective will be brought to bear on contemporary Latin American cultures and societies from the standpoint of the community and as total national systems. Prerequisites: SOCI 80.101 ANTH 10.208 or 10.207.

10.499 INDEPENDENT RESEARCH (3) Supervised research and anthropological investigation leading to preparation of a research project or a supervised field experience. For senior students with a concentration in anthropology. Prerequisite: At least 12 credits in ANTH and consent of department chairperson.

Theatre Arts

Professor: GILLESPIE

Associate Professors: BERMAN (*Chairman*), MANLOVE

Assistant Professor: BAKER

Instructors: FUQUA, LOESCHKE

Assistant Instructors: APPLE, MARCHIONE

The curriculum in the department is designed to provide the best possible learning and training for the student wishing to major in theatre arts. The program is designed to provide, in cooperation with other departments, a broad liberal education as well as specialized professional training with the emphasis placed upon skill as well as knowledge. The main emphasis is the creation of an artistic point of view on the part of the students.

Major in Theater Arts

The major in theater arts is time consuming and physically demanding. Majors must be free to participate in theater activities evenings and weekends.

Participation in the college drama productions is a part of the educational program of theater arts majors.

At the end of the sophomore year, students must be approved individually by the department each semester in order to continue in the program.

Students transferring from other institutions and planning to major in theatre arts at Towson are required to complete a minimum of 20 hours of theatre arts courses in residence at Towson.

The Curriculum

Majors must take a minimum of 36 credit hours in theatre or dramatic literature, including the following required courses: 86.105, 86.106, 86.107, 86.108, and at least 2 courses from the following: 86.411, 86.412, 86.413, 86.493, 86.494, 86.495, 86.496, 86.497, 86.498, 86.480, 86.481, 86.482 and a minimum of 8 to 10 additional elective hours in theatre to make a total of 36 credit hours. Each student will work out an individualized program in conjunction with a faculty advisor. All students are required to successfully participate in production seminar each semester.

Curriculum for a Minor in Theatre Arts

Any 18 hours in theatre courses approved in advance, as a minor, by the director of theatre.

THEATRE ARTS COURSES (THAR)

Service Division

86.025 DRILL IN MOVEMENT FOR THE STAGE

(1) Analysis of individual problems in movement for the stage, and drill in corrective exercises.

86.026 DRILL IN VOICE FOR THE STAGE (1)

Analysis of individual problems in voice for the stage, and drill in corrective exercises.

86.027 THEATRE MANAGEMENT (0) Organization and control of the business, box office, house and publicity programs of the theatre. Prerequisites: None — offered on demand.

Lower Division — Undergraduate

86.103 INTRODUCTION TO THE THEATRE (2)

Theatrical experience through study of the various types, styles, and production processes of the theatre. Theatre as a public art and its relationship to our culture.

86.105 THEATRE AND THE HUMANITIES I (3)

History of the Theatre and its relation to the Arts and Sciences. Greek to Medieval period. Meets three periods for lecture and one period for discussion.

- 86.106 THEATRE AND THE HUMANITIES II (3) History of the Theatre and its relation to the Arts and Sciences. Renaissance period. Meets three periods for lecture and one period for discussion.
- 86.107 THEATRE AND THE HUMANITIES III (3) History of the Theatre and its relation to the Arts and Sciences. Age of Reason and Romantic period. Meets three periods for lecture and one period for discussion.
- 86.108 THEATRE AND THE HUMANITIES IV (3) History of the Theatre and its relation to the Arts and Sciences. The Modern World. Meets three periods for lecture and one period for discussion.
- 86.141 GRAPHIC TECHNIQUES FOR THE THEATRE (2) A course in the standard graphic practices of the draftsman. The emphasis will be on the reading and producing of working drawings, for lighting, costume, and scenic design.
- 86.143 VISUAL ELEMENTS IN THE THEATRE (3) An examination of visual elements in theatrical production to aid the designer, director, and actor to think in terms of visual metaphors for the stage.
- 86.201 TECHNIQUES FOR THEATRE DESIGN (3) Practice in such techniques as drafting, elevation, drapery sketching, figure drawing, and rendering techniques to prepare a student to work in set or costume design.
- 86.211 THEATRE PRODUCTION (4) A survey of acting, directing, technical theatre techniques and resources for the school and community theatre. Students will be expected to participate in the production crews for the college plays. Prerequisite: 86.103.
- 86.221 ACTING I (3) Theory and practice of acting. The development of the actor's imagination and techniques through improvisations, pantomimes, exercises, and simple scenes.
- 86.222 ACTING II (3) Theory and practice of acting. Work in role analysis and character building. Prerequisites: 86.221 and consent of instructor.
- 86.231 MIME I (3) Basic techniques of the art of Mime. Exercise work in images and illusions. Three credit hours, four contact hours.
- 86.232 MIME II (3) Improvisations with images and illusions. Three credit hours, four contact hours.
- 86.241 COSTUME HISTORY AND DESIGN: EGYPT TO RENAISSANCE (4) Study of costume from the ancient Egyptian civilization to the Renaissance. Costume design and construction. Work on crews for college drama productions.
- 86.242 COSTUME HISTORY AND DESIGN: ELIZABETHAN TO 1940 (4) Study of costume from the Elizabethan to 1940. Costume design and construction. Work on costume crews for college drama productions.
- 86.245 STAGE MAKEUP I (1) Survey of materials and study of theories and techniques of stage makeup. Class meets for two hours per week.
- 86.246 STAGE MAKEUP II (1) Advanced stage makeup using materials such as home latex, rubber, collodion, and mask making and doing complete detailed character makeups.
- 86.251 STAGECRAFT (3) Technical aspects of play production including scene construction, scene painting, property building and stage lighting. (Work on technical crews for college drama productions required.)

Upper Division — Undergraduate and Graduate

- 86.307 THEATRE ARTS FOR CHILDREN (2) Theory and techniques of playmaking for children. Lecture, demonstration, and participation in pantomime, improvisation, and story dramatization.
- 86.321 ACTING III (3) An examination of the problems of the actor in Shakespearean roles. Both theory and practice of Shakespearean acting are dealt with. Prerequisites: 86.222, limited to majors and consent of instructor.
- 86.331 PLAY DIRECTING I (3) Fundamentals of play directing through exercises, directorial play analysis, and projects in directing short scenes. Prerequisites: 86.103 or 86.105 and 86.221 or consent of instructor.
- 86.355 STAGE LIGHTING (3) Theory of light and electricity with emphasis on the planning of light plots. Aesthetic effort of stage lighting and problems of lighting small stages with minimum equipment. Prerequisites: 86.251 or consent of instructor.
- 86.361 DESIGN FOR THE STAGE (3) Theory and practice of designing scenery for the stage. Includes a study of the relationship of the set design to the script and other elements of production; and examination of research techniques in preparation for scene designing and practice in designing scenery for many styles and types of drama. Prerequisites: 86.251 or consent of instructor.
- 86.371 THEATRE GAMES I (1) Exercises in acting designed to develop the individual's creativity and encourage work on personal acting techniques. Prerequisite: 86.221.
- 86.372 THEATRE GAMES II (1) Exercises in acting designed to develop the individual's creativity and encourage work on personal acting technique. Prerequisite: 86.221.
- 86.401 THEATRE AS A PROFESSION (1) Working conditions, unions, employment opportunities in the theatre. Preparation of professional credentials, audition material, etc. Prerequisite: Theatre Arts major or consent of instructor.

- 86.407 THEATRE ARTS FOR CHILDREN—ADVANCED (2)** Practical experience in directing and guiding Theatre Arts with children in a classroom or other arranged situation. Prerequisite: 86.307 — Theatre Arts for Children.
- 86.421 PLAY DIRECTING II: THE CONTEMPORARY PLAY (3)** Preparation techniques and directorial approaches to contemporary drama. Individual directing projects of scenes from representative contemporary dramas.
- 86.431 PLAY DIRECTING III: THE PERIOD PLAY (3)** Research techniques and directorial approaches to period drama. Individual directing projects of scenes from representative period dramas.
- 86.441 COSTUME DESIGN (3)** Study of the theories, principles, of costume design and practice in designing costumes for the stage. Including a study of the relationship of color, texture, and historical period to the script and style of a theatrical production. Also practical use of costume research techniques in preparing designs. Experience in designing costumes for many historical periods and styles of plays.
- 86.487 PROFESSIONAL THEATRE SEMINAR (12)** A semester's internship in a resident theatre company. For majors only. Prerequisite: Approval of director of theatre.
- 86.493 PROBLEMS IN THEATRE I (1-3)** Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theatre.
- 86.494 PROBLEMS IN THEATRE II (1-3)** Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theatre.
- 86.495 PROBLEMS IN THEATRE III (1-3)** Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theatre.
- 86.496 PROBLEMS IN THEATRE IV (1-3)** Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theatre.
- 86.497 PROBLEMS IN THEATRE V (1-3)** Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theatre.
- 86.498 PROBLEMS IN THEATRE VI (1-3)** Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theatre.
- 86.411 PROBLEMS IN ACTING I (1-3)** An upper level course designed to deal with the student's individual acting problems on an advanced level. Prerequisites: 86.221, 86.222, 86.231 and approval of plan of study by instructor and department chairman.
- 86.412 PROBLEMS IN ACTING II (1-3)** An upper level course designed to deal with the student's individual acting problems on an advanced level. Prerequisites: 86.221, 86.222, 86.231 and approval of plan of study by instructor and department chairman.
- 86.413 PROBLEMS IN ACTING III (1-3)** An upper level course designed to deal with the student's individual acting problems on an advanced level. Prerequisites: 86.221, 86.222, 86.231 and approval of plan of study by instructor and department chairman.
- 86.480 PROBLEMS IN TECHNICAL THEATRE I (1-3)** An advanced course enabling the student to derive credit for special problems in the area of Technical Theatre. Prerequisites: 86.201, 86.241, 86.251.
- 86.481 PROBLEMS IN TECHNICAL THEATRE II (1-3)** An advanced course enabling the student to derive credit for special problems in the area of Technical Theatre. Prerequisites: 86.201, 86.241, 86.251.
- 86.482 PROBLEMS IN TECHNICAL THEATRE III (1-3)** An advanced course enabling the student to derive credit for special problems in the area of Technical Theatre. Prerequisites: 86.201, 86.241, 86.251.

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Academic Calendar 1973-1974

Fall Semester for 1973

September 4, Tuesday	Residence Halls open
September 4, 5, 6 Tuesday, Wednesday, Thursday	Complete Registration and Change of Schedule for pre-registered students and Orientation for new students—late registration by permission of Registrar.
September 7, Friday	Classes begin
September 10 thru 13 Monday thru Thursday	Schedule changes accepted
October 26, Friday	Mid-Semester
October 29, Monday	Mid-Semester evaluations due
November 16, Friday	Last day to drop a course
November 21, Wednesday	Thanksgiving Holiday after 3:00 p.m.
November 26, Monday	Classes resume
December 12, Wednesday	Last day of classes
December 13, Thursday	Reading Day
December 14, Friday	Final examinations begin
December 21, Friday	Last day of examinations and semester

January Session—1974

January 3, Thursday	Session begins
January 30, Wednesday	Session ends

Spring Semester 1974

January 30, Wednesday	Residence Halls open
January 30, 31, February 1 Wednesday, Thursday, Friday	Complete Registration and Change of Schedule for pre-registered students and Orientation for new students—late registration by permission of Registrar.
February 4, Monday	Classes begin
February 6 thru 12 Wednesday thru Tuesday	Schedule changes accepted
March 22, Friday	Mid-Semester
March 25, Monday	Mid-Semester evaluations due
April 5, Friday	Spring vacation begins after last class
April 16, Tuesday	Classes resume—Last day to drop a course
May 15, Wednesday	Last day of classes
May 16, Thursday	Reading Day
May 17, Friday	Final examinations begin
May 24, Friday	Last day of examination and semester
June 2, Sunday	Commencement

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Vice-President, Business and Finance

CURRICULUM AND INSTRUCTION

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HOUSING OF STUDENTS

Director of Residence Halls

SCHOLARSHIPS AND FINANCIAL AIDS

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TRANSCRIPTS, ACADEMIC RECORDS, REGISTRATION

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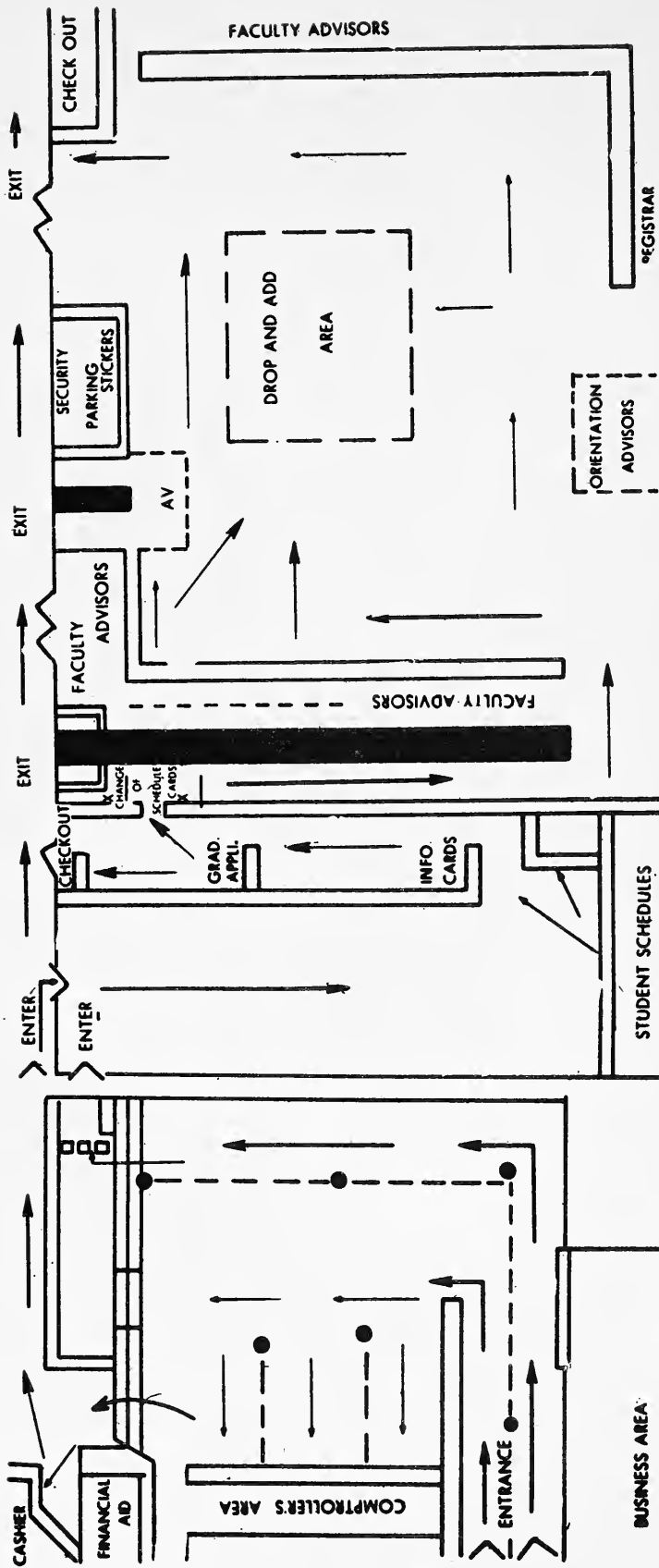
Calendar for 1973-1974

1973

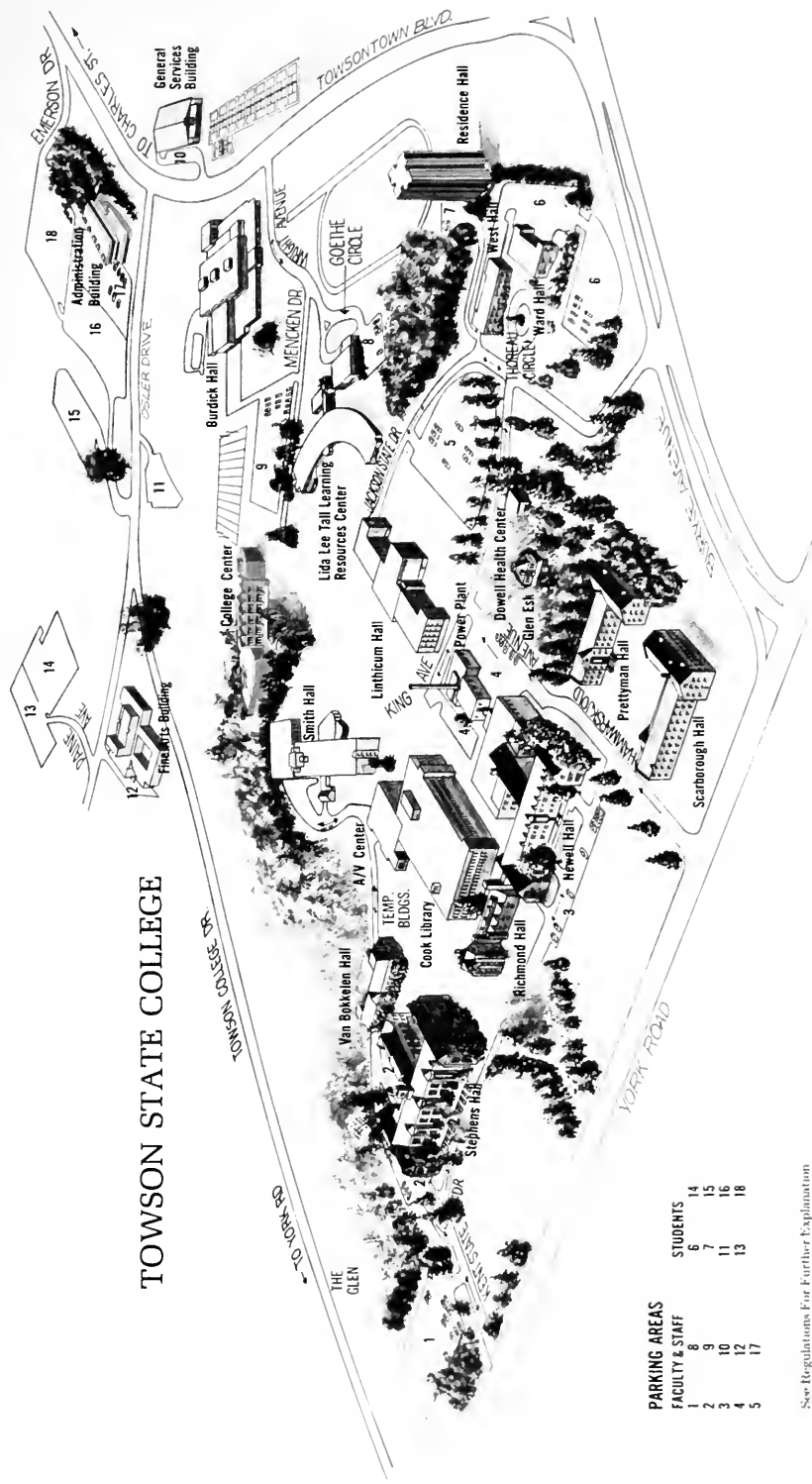
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